THE MICHIGAN FARMER,

A WEEKLY JOURNAL OF AFFAIRS

Relating to the Farm, the Garden, and the Household.

NEW SERIES. DETROIT, SATURDAY, APRIL 7, 1860. VOL. 2., NO. 14.

The Michigan Farmer,

R. F. JOHNSTONE, EDITOR.

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DETROIT MICHIGAN.

The MICHIGAN FARMER presents superior facilities to business men, publishers, manufacturers of Agricultura Implements, Nursery men, and stock breeders for advertising.

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The Farm.

Premiums for Crops Grown in 1860.

Offered by the Michigan State Agricultural Society, and to be awarded at the annual meeting of the Executive Committee in December next.

For the best field of Indian corn not less than four acres, the crop to have been shelled and weighed, and the weight of cured stalks to be reported in the written account, which shall also state the variety of the corn, its method of culture, and the treatment of the land...Diploma, and $10 00
For the best crop of wheat, not less than four acres, first premium 10 00
For the best crop of oats, first premium 10 00
For the best crop of winter barley, first premium 10 00
For the best crop of spring barley first premium 10 00
For the best crop of rye 6 00

Competitors for the premiums on the grain crops will be required to make a statement embracing the following particulars:

1. The previous crop on the land, and when, how much, and what kind of manure was last applied.

2. The location of the field, with its soil and subsoil, with its actual surveyed contents.

3. The kind of seed, where and how procured, the mode of sowing.

4. How the crop was harvested, how thrashed and cleaned, and with what machinery.

N. B.—The competitor may add such other information or remarks on the growth of the crop as he may esteem desirable.

ROOT CROPS.

For the best crop of carrots from not less than one acre, first premium $10 00
For the best crop rutabages from not less than one acre, first premium 10 00
For the best crop mangel wurtzel from not less than one half acre, first premium 10 00
For the best crop sugar beets, from not less than one half acre, first premium 10 00
For the best crop potatoes, from not less than one acre, first premium 10 00

For each of the root crops a statement will be required embracing the following particulars:

1. The exact area of the lot, stating the length and breadth of the land used for the crops.

2. The treatment and culture of the land preparatory to sowing the crop.

3. If sown in rows or drills, the distance apart of each drill; and the quantity of seed sown, and whether sown by hand or machine; if by machine, whose make was it?

4. The period of hoeing, and thinning, and the amount of time spent in the culture of the crop while growing.

5. The weight of or measurements of the roots will be insisted on, and if the weight of tops could be given, it would be considered quite an addition to the value of the statement.

6. Method of securing the crop for winter use, with mode of using them for feeding purposes.

7. A premium of five dollars in addition will be awarded for the best statement which will show the most profitable application of any of the above named crops. Namely, how they were actually fed for a given time, and the amount of increase made weekly or monthly by the animals to which they were fed, with such other observations as the competitor may consider of interest.

MISCELLANEOUS CROPS.

For the best crop of broom corn, not less than one acre $5 00
For the best crop of clover seed, not less than one acre 5 00
For the best crop of timothy seed, not less than one acre 5 00
For the best crop of beans, not less than one acre 5 00
For the best crop of peas, not less than one acre 5 00
For the best crop of buckwheat, not less than one acre 3 00

Statements will be required giving the particulars of the method of culture, the quantity of seed used per acre, the time consumed in cultivation, the method of harvesting, and of fitting for market.

Each statement must be accompanied with a certificate sworn to before an officer authorised to take affidavits, showing the surveyed contents of the lot in which the crop was grown that is entered for a premium, and also the amount of the measured or weighed crops, signed by the surveyor and by the applicant for the premium, and also by such assistant in weighing and measuring as may be employed. The following may be the blank forms of such certificate:

—— County, ss.:—A. B. being duly sworn, says, he is a surveyor; that he surveyed with chain and compass, the land upon which C. D. raised a crop of —— the past season and that the land was in one contiguous piece, and the quantity is —— acres, and no more.

A. B. Surveyor.

Sworn to before me, this —— day of —— 186 .

——, Justice.

—— County, ss :—C. D. being duly sworn, says, that he raised a crop of —— the past season upon the land surveyed by A. B., and that the quantity of grain raised thereon was —— bushels measured in a sealed half bushel; and that he was assisted in harvesting and measuring said crop by E. F., and that the annexed statement, subscribed by this deponent, as to the manner of cultivation, expense, &c., is in all respects true, to the best of his knowledge and belief; and that the sample of grain exhibited is a fair average sample of the whole crop. C. D.

——, Justice.

—— County, ss.:—E. F., being duly sworn, says, that he assisted C. D. in harvesting, getting out and measuring his crop of ——, referred to in the above affidavits, and that the quantity of grain was —— bushels, as stated in the affidavit of C. D.

E. F.

Sworn to before me, this —— day of —— 186 .

——, Justice.

ESSAYS.

The Executive Committee will award premiums for essays as follows:

For the best essay on the agriculture of the Grand River Valley, or any part thereof—Said essay to state the topographical features of the section described, the amount of cultivated and uncultivated lands within its limits, the approximate population, its geological character, its mineral productions, its botanical productions, the agricultural character of the lands, the modes of culture pursued, the kind of crops raised, a description of the best farm steadings or buildings for the accommodation of stock or crops, the herds of the best bred cattle, with notices of whence they were brought and when they came into the State, also of flocks of the best breeds of sheep, and of such horses, swine or other animals, as may show the present position of the section of the State described $80 00
For the best essay on the cultivation of corn 15 00
For the best essay on the cultivation of the grape 15 00
For the best essay on the growth, production and profitable consumption of hay 15 00
For the best essay on the growth and profitable use of the sorghum plant, in the production of molasses or sugar, or as a fodder crop 15 00
For the best essay on the right use of barnyard manure, and its application to improve land and produce crops 15 00
For the best essay on the treatment of marsh lands, their drainage and after culture 15 00

Essays to compete for the above prizes will be required to be sent in to the Secretary by the first of December, 1860.

H. G. WELLS, President.
R. F. JOHNSTONE, Secretary.

Affairs at the Corners.

MR. JOHNSTONE—I got your letter of last week. I feel terribly disappointed in some respects about your not being able to visit Blackberry Corners this spring; and yet, taking it all round, I don't know but it will be best after all for you to wait till another season. Smith thinks it will. But his object in saying so is more flattering to me than to you. He says if you come and see everything, there will be nothing for me to write about, and he would rather read my letters in the FARMER than to see all the editors in Michigan. So, as you say you have too much to do to spare time to come out here at present, I'll write now and then, to keep you and the world posted as to the progress of affairs at the Corners. Smith thinks I have done the paper as much good as I have the Corners with my writing. He begins to understand things a good deal better, and by having a paper of his own he seems to have more judgment in regard to the articles you print. He sees, jest as I do, that you don't expect that every man who reads the paper is going to try to do everything you tell of that any body else has done. As I told him long ago, it was not expected that we'd make such fools of ourselves—but he used to say, "What does the man print such things for, if he don't mean to try to make us do them, and then call us ignorant fools if we don't?" Now he says it does him most as much good to read what is going on among farmers in other parts of the world as if he could do it all himself, and he understands that your object is to give us this general information so that if there is anything of the kind we wish to do, we will know how other folks did it, and what the result of the matter was. Isn't it astonishing how a man's mind expands by having a paper of his own in his house? Smith is ten times more liberal minded and public spirited now than he was when he lived by borrowing his newspaper.

I only write you this to show what an influence even a poor writer like me can have; for if I hadn't broke out with that first letter of advice to you last December, Mr. Editor, I do believe Smith would have been borrowing papers and running out against book farming and agricultural editors to this day. Besides, who would have known that there was such a person as me or my calf, or such a place in the agricultural world as Blackberry Corners? I believe when the spirit moves a man to strike, that is the time for him to strike, if ever; and I flatter myself that I struck just at the right time, both for the Corners and for the FARMER. Smith thinks so too.

Speaking of Smith makes me think of what he told me the other day about our rich neihgbor over the way, the Hon. Gen. Bumpus. He heard what I said about him in my last letter, and so one day in the postoffice asked Smith to lend him the paper. Smith sent it over by one of his boys; and the next week it was brought back and another one borrowed, and so on, every week since. I reckon it will not be long before you'll have his name on your subscription books beside mine and Smith's. Smith hinted that he thought so too.

The paper you send to Zeke Acres comes regular, and Zeke takes it as cool as if he had signed for it himself, and asks no questions.—I saw the corner of one with Zeke's name on it sticking out of Bill Putter's pocket the other day, and he was coming straight from Zeke's, so I guess he's begun borrowing too, which is all right if he ends by subscribing, as most likely he will. So you see there's no telling where the influence of one man will end.

As to Agamemnon 1st, I shan't say much about him in this letter. You know calves just coming out of their winter keeping, with the long hair sticking up in patches all over their hides ain't very attractive things no how, to look at. I dare say blooded cattle are no exceptions to this rule, and that my calf will show his quality as well as ever by and by.

I haven't heard Smith say much about having the State Fair here lately, but he talks some of investing in the fast horse business, or patent washing machines, he don't hardly know which yet, and if he should go into either he would naturally feel a good deal of anxiety about where the Fair is to be held.—However, he will be more reasonable about it than he used to be, because since reading your paper he begins to see that there are other places in the world than Blackberry Corners.

Spring work will begin to come on now pretty fast, and I shall not have much time to write, but will contrive to let you know if anything new turns up.

Yours in respect,
TIMOTHY BLADES.

Blackerry Corners, April 3, 1860.

Butter for Market.

Benton & Caverly, of Boston, have published a circular for instruction to those who are preparing to make butter to pack down for that market, from which we take the following suggestions as worth noting by many of our dairy men and dairy women:

"1st. Cows of good milking qualities, [that is such as give good milk.]

"2d. Food—Keep the pasture free from rank and strongly flavored weeds. Pasture should be of hilly or rolling lands, with good clear, running water. Pungent roots and vegetables, such as turnips and cabbages, are apt to injure the flavor of the butter and injure its keeping qualities. Pumpkins and carrots are the best vegetable food when the season of grass is over, and give a fine color to the butter. But ground feed, such as the bran of wheat, rye, ground oats, or buck wheat, is believed to be best in winter, as it keeps the cows in thriving condition, without too much increasing their fat, and makes the best keeping and best-flavored butter.

3d. Keep the cows quiet, particularly during warm weather. The milk given by cows when in the periodical fever, or when heated from any cause, will not make the best flavored or best-keeping butter, and should be rejected for such use.

4th. Keep the atmosphere of the milk-room perfectly fresh and pure—free from all vegetables of every kind, and at as even a temperature as possible. It should not be warmer than 95 deg. Open the windows at night and close them in the morning, during warm weather. As soon as the milk coagulates, or just before its change occurs, it is ready to be churned or skimmed. Some of the best butter-makers churn the milk with the cream; others skim and churn only the cream.—When skimmed, the cream may be kept in the cream jar 12 to 24 hours, occasionally stirred, but never covered. Tin pans are commonly used for setting milk, but tin pails, holding 12 quarts, are used by very many good butter-makers. The Scotch butter-makers of St. Lawrence county, prefer earthen as a general thing.

5th. The contents of the churn should be at the temperature of 64 deg. Neither hot or cold water should be turned into the churn to regulate the temperature. Setting the churn in hot or cold water is a better way.—Hot water turned into the churn injures the color and grain of the butter. Soft water is indispensable for washing butter to the best advantage. If you cannot otherwise get soft water, save rain water and cool it with ice.—The water from ice is always soft. When thus washed it is ready for salting. When the conditions are right, the butter will 'come' in 20 or 30 minutes. When done the butter should be taken from the churn and put into smaller vessels partly filled with water at 40 to 45 deg., and the butter-milk forced out with a small dash or ladle. Then put in trays and washed until the water used ceases to be the least discolored with butter-milk.—The great point to be attained in washing or working butter, is to expel all the butter-milk, without over-working the butter, which spoils the grain, and renders it sticky or greasy. After the butter has stood in trays about 24 hours, and been worked lightly three or four times, it is ready for packing. Some good butter-makers do not work so many times—some good butter-makers never wash their butter at all, only in very hot weather. After the firkin or tube is filled, the butter should be covered with a thin piece of muslin and the whole covered with salt and kept moist. Over-salting is one of the most common faults of butter-making. Coarse salted, or over-salted butter, so that it will grate in the teeth, must be sold from 3 to 6 cents per lb. lower in market. About the best rule for salting butter, is for every one to salt to suit their taste.

"The tubs or kegs should be filled with a hot brine made of clean salt, and soak at least 24 hours before any butter is packed in them. The butter should be packed solid. A hard-wood pestle or mall of 3 or 4 lbs. weight, is a good thing to pack it down. White-oak, or the heart of white-ash firkins, holding about 100 lbs., are most largely used, and decidedly best where the butter is to be kept a long time. Other kinds of wood impart injurious flavors to the butter."

FARM NOTES.

Lice on Cattle.

We see that the water in which potatoes are boiled is recommended as one of the best remedies to drive lice away from cattle. The water should be rubbed in until the skin is perfectly wet. As this remedy costs nothing, is perfectly safe and easily applied, it ought to be tried; and we hope some of our correspondents will report their success with it. Several have lately complained of having their cattle badly infested the present spring.

Scale of Production.

From a table published in the New England *Farmer*, it is shown that the average production of wheat in all Scotland, averaged in 1856, twenty-nine and a half bushels per acre, rye twenty-four and a half bushels, barley thirty-four and a half bushels, oats thirty-six and a half bushels, potatoes one hundred and two bushels, turnips six hundred and ninety-four bushels. In Massachusetts in 1855 the average production of the same crops was: wheat 15¾ bushels, rye 12½ bushels, barley 20 bushels, oats 21 bushels, potatoes 93¼ bushels, and turnips 231 bushels. The average production of corn in Massachusetts that year was 28¼ bushels.

Salt on Grass and Wheat.

J. N. H. of Salem, N. Y. writes to the *Genesee Farmer*, and recommends a mixture of four bushels of salt to two of plaster as a top-dressing for timothy, and says farther:

"For potatoes, my rule is to mix one bushel of salt to four bushels of plaster, and put a tablespoonful on the potatoes in each hill at the time of planting.

As I live near the Onondaga salt springs, I have been experimenting with salt on various crops. I was told that salt would kill my grass and grain; I determined to know how much salt it took to do that, and I commenced with half a bushel to the acre, and every year I have added another half bushel, always mixed with with two bushels of plaster, and now I have got to sowing salt at the rate of four bushels per acre, and find this quantity pays the best. Last spring, I sowed eight bushels of salt and four bushels of plaster on two acres of wheat, and the result was a beautiful crop. After deducting one-quarter of an acre killed by the frost and thrown away, the balance produced 42 bushels of good wheat.

Sugar Making—Indian Antiquities—Reflections—Spare the Sugar Trees.

EDITOR MICHIGAN FARMER:—*Dear Sir,*—Having taken it into my head to spend a few weeks in the *Sugar Camp*, I am here among the tall and stately maples, which tower around me like pillars to the mighty temple of nature. I am *here*, in the town of Millington, county of Tuscola and State of Michigan, or to use a cognomen more familiar throughout the country extending thirty miles to the south of this place, I am in "Town Ten"—that is to say, Town Ten North, of Range Eight East, according to the United States survey of lands situated in the State of Michigan. Within about three-fourths of a mile of this point there are now in full blast five camps, containing over two thousand trees. These are but a small portion of what might be obtained within the same distance. Taking it in all respects, this town of Millington is one of the finest for the business of maple sugar making I have seen in any country. Thousands of maples here exist whose exteriors bear indubitable evidence of having been worked by the genuine native Americans, "time whereof the memory of man runneth not to be contrary." Many of their cabins are still to be seen here, in form more or less mutilated; while their decaying "store troughs," their ash heaps and *corn holes* all bear evidence of the former populous condition of the Indian race in this vicinity. Indians generally congregate upon the very best of land, and in this respect Millington constitutes no exception to the general rule. One of the greatest objects of general curiosity to be met with in these sugar camps is the *Indian sap trough*. They are made of the bark of the white birch, and their construction is very simple. A square piece of bark, a little larger than a common sheet of fool's cap, is taken, and a plait folded and sewed fast in each of its four corners completes the trough. Of these aboriginal devices hundreds are to be found lying in and about the wigwams of the former tenants of the soil. Their average contents from three to four quarts, and their weight I should judge not to exceed two or three ounces each. When the proprietor desires to emigrate from one place to another, he, or rather his squaw, *unmakes* these troughs, by taking out the stitches which fasten the plaits in the corners, spreads them even, and packs them together like reams of paper, when a single poney will carry hundreds of them to any desired distance. But the Indians have probably worked these camps for the last time, and, to look upon their decaying wigwams and implements, and upon the scars in the lacerated sugar trees, which time, by every additional year's growth, is hastening to obliterate—to look upon the mouldering ash heaps, all that is now left of the former "Council fires" of a once powerful people, is suggestive of solemn reflection. Whatever may be our prejudices—whatever may have been our feelings of indignation, as we have read of the barbarous cruelties of Indian warfare: all these feelings must melt into sympathy over the present fallen condition of this interesting race of people. Where are the warriors who have fought more bravely than king Philip, than Tecumseh, than Black Hawk, and many thousand more of the Indian race? But their struggles were fruitless, for they fought against an enlightened and powerful people; but that is not all—they fought against a "*manifest destiny.*" Where are the orators who have given to the world stronger specimens of eloquence than abound in the speeches of Red Jacket and many others of his race? But to use an Indian metaphor, their "path is toward the setting sun"—and the sun of their destiny is fast setting, to rise no more. But the Indian does not repine; his majestic native dignity, would revolt at the idea. But after all, why should he repine? His lot, with a slight variation, is but the common lot of all. Where now are the once powerful nations that once peopled the earth? Where are Jerusalem, Babylon, Rome, Venice? Where are Tyre, Sidon, Balbec? As we look around us, and contemplate even our country—that country of which Americans have been taught to be so justly proud, while it is yet in the bloom of youth, having yet hardly attained the full vigor of manhood—can we not discover, cankering within its very bosom, the seeds of those elements which are one day destined to work its downfall? Do we not, even *now*, witness a waning of those strong sentiments of affection for our common country, and our *whole country*, which were once taught us in the nursery, in the school room, from the forum and from the pulpit? Readers reflect, and say if this is not even so. And "can ye not divine the signs of the times." But enough. I began to talk about sugar making, but have fallen into a strange reverie, to grow out of so sweet a subject. To return then we are, to all present appearances, in the midst of the sugar season. We have had one excellent *run* of sap, and two or three slight dashes. The run of the 14th to 16th inclusive, which followed a slight fall of snow, was equal, in many camps, to a pound to the tree, and exceeds all others of the season down to this time. The variation of product in different seasons, and under the management of different hands, is very great, ranging from one to four pounds per tree, and averaging, take one season with another, about two and a half pounds. The extreme low prices at which southern sugars were sold a few years since, were detrimental to the sugar interest of our new settlements, and caused many of our farmers to neglect their camps; but the recent high price of the southern article, together with the scarcity of money, and a consciousness of the superiority of the maple over all other sugars, is causing a general return to the sugar camps. A large item of expenditure will thus be avoided, while many make it a source of very respectable income. One man is capable of working from 200 to 300 trees, depending on their compactness, and the convenience of his arrangements; but suppose the number to be two hundred, and the time occupied one month, the account will stand somewhat as follows:

A cheap ordinary outfit of 200 sap troughs, kettle or pan, arch, &c., may be set down at a cost of $25, on which we may estimate the wear and tear at 20 per cent., say	$5.00
One man one month, finding self $1 per day, 26 days	26.00
Use of team to haul wood	2.00
Total cost	$33.00
Cr. By product of 200 trees, at an average of 2½ lbs. per tree, 500 lbs. at 10 cents per lb	$50.00
From which deduct cost, as above	33.00
Nett profit of 200 sugar trees	$17.00

In large camps where good facilities are furnished, the expenses may be diminished and the profits increased. Mr. Jacob H. Hoovers of this township last year worked a trifle over 400 trees, commencing very late in the season, with a very indifferent outfit. The product was about 1200 pounds. This year he is working about 700 trees, with better outfit and a prospect of better returns. Next year he will probably increase his camp to 1000 trees. This township of Millington alone is probably capable of producing two hundred and fifty thousand pounds of sugar per annum, worth at least ten cents per pound or $25,000. While we do not pretend to any glittering show of profit, the foregoing figures show a handsome return for the labor invested, fully equal to that shown from the agricultural labor of our state, take one year with another.

Farmers, *one word of caution.* Now that the country is new, and you are waging a war of extermination upon the forests by which you are surrounded, *spare the sugar trees.* Select at least one spot in some suitable place of preservation, and, whether the number of its trees is fifty or five hundred, *hold it sacred from the axe.* Let no careless man or wanton boy lay unhallowed hands upon a single tree. As time advances, trim out the underwood, burn the old logs, and fence in and seed to grass. It will afford a delightful summer retreat for your cattle, and if you are fond of musing and contemplating the works nature, a woodland walk through its umbrageous recesses, in summer or early autumn, will be perfectly enchanting. Spare the sugar trees.

NORTHERNER.

Millington, March 25th, 1860.

The Peabody Prolific Corn.

The Peabody corn is the old Baden corn, which had its day twenty-two years ago. It was revived by Charles A. Peabody, of Columbus, Georgia, and was the last in a series of humbugs introduced by this notorious gentleman. First, came his ever-bearing strawberry; next, his orange watermelon; then followed the famous Peabody's Prolific strawberry; and last the Peabody corn, neither of which, at this day, have a solitary advocate so far as we know, among the thousands of honest horticulturists and farmers, who have been bled to the tune of from five to fifty dollars each. These were all grown upon a light, warm, porous soil, highly stimulated with guano, and produced just such results as may be expected by every farmer on similar soil and thorough cultivation; but when introduced into general cultivation in the ordinary way, the results proved so unsatisfactory that all were abandoned. The corn, with good culture, yields a number of *short* ears upon a single stalk; the plant suckers freely, yielding an abundance of excellent fodder, but requires a warm climate to insure maturity. It requires no material difference in the mode of culture from that of any other corn, except, if the suckers are allowed to grow, not more than two plants should be left to stand in a hill.—*Valley Farmer.*

The Food of Plants.

We cannot see the introduction of food into the system of the plant so easily as in the animal, yet we observe the former increases in size and developes its parts as completely as these offices are effected in the latter. The plant, by the nature of its relations, can only receive its food from the soil to which it is fixed by its roots, and the atmosphere which surrounds its stem and branches; therefore, a very natural division of our subject arises out of this consideration, namely, first, the elements derived from the atmosphere; and second, the elements derived from the soil. Before we can understand what is necessary to constitute the food of plants, we must understand of what the plant chemically consists; because every element found in the organization of the plant must have its representative either in the earth or the atmosphere. All must be present in the one or in the other, or there is no power of creation. It is true we cannot show the exact part played by such element in the organization, but we can show the ingredients found in it. A very simple process is sufficient for our purpose at present. The first step to be taken is to ascertain the quantity of water which the substance which you wish to examine contains, and this you may easily do by weighing it, and then carefully drying it, and the loss it sustains is the amount of water driven off. You have a practical illustration of this in haymaking. The grass is cut in a green state, and after it has been exposed to the sun and wind for a time it is withered, much lighter, and "dried." The same happens in the case of the tops of turnips and potatoes, when cut and left in the air, and the loss is apparently much greater. I need scarcely tell you that water is a principal constituent of every tissue, and some notion may be formed of the part it takes in the nutrition and health of animals and plants, when it is known that beef and mutton contain, in the raw state, 78 per cent.; potatoes 72 per cent; and turnips, from 88 to 91 per cent of water. By drying, then, you ascertain the quantity of water in a given weight of any vegetable substance. Next, take a definite weight of the dried substance (whatever it may be), and burn it in a vessel from which the air cannot escape. That which flies off in combustion is called the organic or combustible part; and what is left is an ash (small in quantity compared with the weight used in the experiment) called the incombustible or mineral portion. The combustible portion is called the organic, because it consists essentially of elements necessary to the formation of those substances which belong alone to vital organisms, as starch, woody fibre, sugar and gum, and it escapes principally in the form of carbonic acid and water. The ultimate elements are carbon, oxygen, hydrogen, and a little nitrogen. The incombustible or inorganic portion is what is left in the vessel as ash, and consists of potash, lime, magnesia, phosphoric acid, sulphuric acid, hydrochloric acid, and oxide of iron. The results of this general analysis may be stated to be water, organic or combustible matters, and the ash or inorganic part. It will convey to your minds a better notion of the relative proportions of these, if I state to you the composition of a few well-known examples taken from the vegetable kingdom, when subjected to this mode of examination. In round numbers, 100 parts of turnip contain 90 of water, nine of organic matter, and one of ash; 100 parts of cabbage contain 86 of water, 12 of organic matter, and two of ash; 100 parts of wheat contain 12 of water, 85 of organic matter, and 2 of ash; 100 parts of white straw contain 14 of water, 78 of organic matter, and 8 of ash. These are the results in the cases mentioned; but it must not be supposed that the substances here found are separate and distinct in the living plant, and that each has a separate existence or independent value in the vegetable organism.—Such is not so. The arrangement is purely artificial, and only serves the purposes of scientific detail. All are mixed in the tissues, and equally important to plant life. From the constitution of the plant it can only be in relation with the soil and the atmosphere. It consists of a root, a stem with its branches and leaves, along with which may be associated the floral appendages. By the root it is fixed in the ground, and draws food from the soil about it; by the leaves it absorbs those elements which the atmosphere presents in a gaseous form. The stem is little more, as far as the office of nutrition is concerned, than the medium of conveyance between the organs at its own extremities. Having then settled the composition of vegetable matter, and that plants derive their food from the atmosphere and the soil, let us next proceed to show what is furnished by each. During the earlier periods of agriculture and vegetable physiology it was thought that the soil alone was the source of the food of plants, and that the air supplied nothing used by it in development. Now, however, a very different view is taken. It is indeed well known that the atmosphere supplies the greater part, if not the whole, of the combustible or organic portion. You are aware that we are to look to carbonic acid and ammonia for the ingredients necessary to furnish the organic elements. These are always present in the atmosphere, and in contact with the leaves which absorb them. Experiment has shown that they are quickly absorbed by the plant in sunshine, and pure orygen put in the place of the carbonic acid. Without reflection, it might be supposed that the whole of the carbonic acid and ammonia in the air would be exhausted by the constant absorption of plants. Such would be the case if the supply were not kept up. "We know," says Liebig, "that careful provision is made for the continuance of organic life. Man and animals live in plants. All organized beings have only a passing and short existence. In the vital processes of animals, the food which nourishes them is transformed into its original form; and the same change takes place with the bodies of all animals and plants after death. Both of these substances are gaseous, and return to the atmospheric sea, to serve once more for the formation and development of a new generation." Though we may doubt the extent to which organic matter in the soil is made available to the plant, we can have no hesitation in saying that the plant derives the whole of its mineral food from the earth. Whatever is found as ash after combustion is the mineral portion, and pretty nearly represents the elements of which the soil consists. I may, in a general way, state that the mineral ingredients consist of silica, salts of potash, the alkaline earths, and oxide of iron. That they have a fixed relation to the plant is shown by the circumstances under which they exist in connection with the other ingredients of the vegetable organism. Thus we find one element preponderate in a certain tribe or plant, or even in a part of a plant. For example, silica is most abundant in the straw of such plants as wheat, oats, rye and barley. It constitutes 67 or 68 per cent of the ash, while the ash of the turnip does not contain over three, and that of clover scarcely two per cent of the ash. Clover contains much more lime than either wheat straw or the turnip; and seeds generally a much larger proportion of the phosphates. Potash is an important constituent of the sap, and is found in the ash of the bulb of the turnip in the proportion of about 37 per cent, in that of the leaves and stem of clover about 25 per cent, and in the ash of wheat about 30 per cent. The nature or constitution of the soil make no appreciable difference in the quantity of any mineral ingredient which the plant contains. If it is its nature to possess but a very small amount of any one or all the elements found in its ash a superabundance in the soil does not increase it, nor does a sparing supply sensibly diminish the amount found on analysis. Such being the invariable relation existing between the mineral elements individually and the other ingredients of the organism, it is plain that an entire absence of any would entail a state of barrenness. It also is to be remembered that the plant is fixed to one little spot, and that if food is not immediately round its roots it has no chance of life. Hence it requires there to be a thorough mixture of the usual ingredients of soil, so that every rootlet may have all the components of food within the spheres of its action. Admitting these to be a fixed and nearly invariable amount of incombustible matter in each crop produced by the farmer, the soil must suffer deterioration. The natural effects of repeated cropping must be the gradual removal of the mineral elements from the soil which plants use as food. The average percentage of ash in a given quantity of corn does not at first sight appear large, but a little consideration will show that frequent repetition will exhaust some, if not many, of the essential principles found in the food of plants. Exhaustion has occurred in some exporting countries, and a certain amount of deterioration in the soil of others where artificial manures have not been brought to replace the loss sustained by the removal of produce. It is said that whole districts in the State of New York, which 70 or 80 years ago were remarkably fertile, and yielding, without manuring, from 12 to 16 bushels of wheat per acre, now only give from two and a half to four bushels. The reason of this change is plainly due to the removal of mineral substance in the corn sold and consumed by the population of a distant country; and until compensation is given in the form of phosphates of lime and potash, mere labor will not restore fertility, or produce a remunerative crop. It is easy to calculate the loss which a given portion of land suffers after each crop, as each bushel of wheat, or a given quantity of any other article of produce as a known quantity of alkali and earthly salts, and an analysis of the soil is only required to enable you to say how often the same crop may be raised before exhaustion occurs. It would be of little use te know accurately the physiology of the plant, the ingredients of its food, and the chemistry of the earth, if we could not turn the knowledge to profitable account. But in this case the efforts of the physiologist and the chemist have been abundantly successful, for they have explained the cause of soil deterioration, and have suggested the most appropriate means of restoration.

The Alsyke Clover.

The *Trifolium Hybridum*, Swedish Clover, or Alsyke clover as it is called, is a hardy annual variety of clover, that possesses some of the qualities of the white clover, and also of the common red clover, but is not a hybrid variety as its botanical name implies. The Alsyke Clover resembles the white clover in the form and color of its flower heads, but instead of the creeping habit of the white clover it has the erect one of the red clover, growing like it also from the crown of the root.—The Alsyke also is perennial like the white clover, and comes in year after year without sowing, and is therefore much used for pastures as well as for hay. It has been tried in Canada for several years, and James Wilson, of North Dumfries, in a late letter to the Canadian *Agriculturist* gives his experience with it as follows:

"In the February number of the *Agriculturist* for 1858, I saw a letter from Mr. P. R. Wright, of Cobourg, where in he gave a description of a new kind of Clover, called the 'Alsyke' or Perennial Hybrid Clover; he also stated that he had grown it for a number of years, and recommended it very highly; he said if he could only persuade one hundred or even fifty *intelligent* farmers to make a trial of it, and report their success to you, he felt confident that red clover would soon be numbered among the grasses that were in Canada. Well, having some confidence in a Canadian gentleman's recommendation, I determined to give it a trial, and I would now report with what success to you. In the month of April, 1858, I procured four pounds of the seed, from Mr. Fleming, Toronto, that being all he could spare me, I sowed it in a small field containing about one acre that was sown with Barley. Not being accustomed to sow such a small quantity to the acre I sowed it rather thick and only got it to go over three-quarters of the acre, the other quarter I sowed with the common red clover, so that I had a fair chance of comparing the two. I give the preference to the Alsyke by a great deal; it will make better and finer hay, and from what I have seen of it for the two past winters, I think it is a clover that is going to stand the winter better and not be so liable to be thrown out of the ground by the spring frosts as the red, a quality that I consider one of its best recommendations in this part of the country, where the red part of the clover is sometimes completely killed out by the freezing and thawing of the ground in the spring. I did not cut it until the seed was ripe, which was on the 19th July, 1859. There was at least two tons of hay from the three fourths of an acre, which I consider a good yield, when the frosts of last summer are taken into account. It has two things at the present time against its not being more generally introduced, the first is, the little that is generally known of it in this country yet—the second is the high price of the seed; but as it becomes better known, I am satisfied the demand for it will increase. I believe I am the only one in this part of the country who has cut a crop of the Alsyke the past year. I believe there are a number of others who seeded down small patches last year; I also seeded another acre in 1859. I intend to sow more largely of it this spring, so that Mr. Wright will see it is working its way."

In addition to what Mr. Wilson says we have in a condensed form what has been the results of trials with it in England since it was first introduced there in 1834.

1. The Alsyke Clover is more permanent in duration than any of the varieties of Red Clover.

2. That from having more fibrous roots, it does not withstand drouth so well as the red clover, which has long, deep, penetrating roots.

3. That it will not yield quite so heavy crops as the red clover on land well adapted to the growth of the latter.

4. That it is more keenly sought after and eaten by cattle, sheep and horses, than even the white clover, and hence it is considered more nutritious.

Mr. Flemming, a seedsman at Toronto keeps this variety of seed on hand and has sold about 800 pounds during the past two years.

The Garden & Orchard.

Tar on Trees.

MR. EDITOR:—Your paper has lately contained several articles on this subject, and I will just give you my experience. A few years since I put out an orchard of two hundred apple trees. The first winter after setting, I lost about twenty-five trees by the depredations of mice and rabbits. The next fall, the trees had then had two seasons' growth, I gave every one a heavy coating of common tar; it covered the whole body of the tree to the height of two and a half or three feet from the ground. This was in the year 1857. They have had two seasons growth since the application, and I never knew trees to grow more luxuriantly. Since the application of the tar I have not lost a tree, either from tar, mice, rabbits or any other cause. The lot immediately adjoining the orchard is a wood lot, and we hardly cross it at any time without seeing rabbits. But the one application so far has been effectual to repel them. Next fall I shall apply it again. I don't know any thing about *coal* tar, I used the *common* tar that we get at the stores. It was recommended to me by an Englishman in my employ, who assured me that in Enland it is almost universally used. It certainly did not injure my trees, and they had so thorough a coating of it that upon many of them the unmistakable evidence of its application still remains to be seen.

H. C. GILBERT.

Coldwater, April 2d, 1860.

Treatment of the Dahlia.

My mode of treating this flower is this:—Never plant out sooner than from the first to the middle of June. From the middle to the 20th is a good time. I have planted the first of July, and have had a good bloom.—Manure and well prepare your ground before planting; use small plants in pots, of the current year's propagating; the most successful exhibitors use such plants only. As soon as planted, place a large stake to each, and tie as they grow. My reason for putting the stakes thus early is, to avoid injury to roots, which would take place after the dahlias had commenced growing. As the plants advance in growth, the knife should be freely used, cutting out at least one-half the bloom, as well as keeping the plants low. Under this treatment they will have no disposition to flower before September—a season quite congenial to the plant. Exquisitely shaped perfect blooms will be produced, faultless alike in shape, symmetry and size. I should remark, when the plants commence showing bloom buds, at least three fourths should be pinched off as they appear. Those which are allowed to perfect themselves will be superb. At the time of planting out, a deep mulching of half-rotted manure spread over the ground is a great benefit; and in dry weather, through all stages of their growth they should be freely watered; if liquid manure is used occasionally, so much the better. With this treatment,—late planting, young plants, pruning, disbudding, and late blooming,—the good qualities of the dahlia become fixed, so that the good cultivator can, with almost a certainty, rely upon the production of flowers, exquisite alike in shape, symmetry and size, with every variety of color in perfection.

I could give a long list of superb varieties, but will confine myself to twenty-four, which the amateur may plant without the least disappointment.

PLAIN OR SELF-COLORED DAHLIA.

Cherub, bright light orange yellow; a fine deep flower.
Col. Windham, deep rose, with a small bronze tip, fine shape.
Goldfinder, deep golden yellow; a large, useful show flower.
Hon. Mrs. Trotter, white, distinctly tipped and edged with rose; novel and attractive.
Lady Popham, white, delicately tipped with lavender; of the finest form.
Lollipop, salmon; shape nearly two-thirds of a ball, high centre.
Lord Fielding, nearly black, small, well arranged petals, high centre.
Miss Pressley, white, heavily edged or picoteed with dark purple; a constant, new and pleasing variety.
Mrs. Church, deep yellow, tipped with lake; a full sized flower of fine form.
Rachel Rawlings, delicate peach, fine form.
Triomphe de Pecq, dark crimson, a large full flower, extra fine.
Village Gem, clear white ground, edged and tipped with rosy crimson.

FANCY DAHLIAS.

Beauty of High Cross, deep gold, heavily striped with rich crimson.
Carnation, white, beautifully and regularly striped with purple, constant.
Cleopatra, orange yellow, striped with crimson scarlet, good form.
Comet, dull red, mottled and striped, good shape.
Countess of Bective, rosy lilac, tipped with white, full sized constant flower.
Duchess of Kent, pale yellow tipped with white; fine form.
Empereur de Maroc, maroon, tipped with white; dark and rich.
Lady Paxton, red, tipped with white; fine petal and form; beautiful.
Le Defi, orange buff, striped with lake; full size; good form.
Marc Antony, deep yellow, finely striped and marked with bright red; fine form.
Oliver Twist, the best purple and white striped fancy; very superior form.
Village Bride, pale yellow, striped with bright red; a full-sized flower, constant and large.—*John Saul, Washington, in Gar. Monthly.*

Reclaiming Orchards.

G. W. P. in the Boston *Cultivator* thus narrates his operations in an old orchard of seventy trees on a light sandy soil, that all the neighbors thought worthless. Two-thirds of the tops of the trees were dead, and the remainder was covered with moss and dead bark, and several of them had large cavities in the trunk:

I put the iron scraper to work, and took off all the moss and dead bark. I then scraped the buts of the trees until they became smooth; then trimmed the dead limbs; made a compost of clay, peat muck, oil soap, and green cow-manure, mixed and stirred well with water, and used a common whitewash brush to wash the trunk of the tree with this preparation. (A tree may need two coats after being scraped.) I then spread thirty cords of peat muck and lime, mixed thoroughly; then ploughed the orchard with a large plow, which turned a furrow twelve inches deep. The result was that the sand, gravel, and roots were turned up in abundance.—When the plow brought up against a root, it was cut off six feet from the tree, without regard to size. The man that followed the plow was ready with an axe to cut, and clear the rocks from the plow. When the ground was plowed it was covered with roots which had to be carted off, and the ground harrowed over.

The object in cutting off the roots, is to have new fibrous roots grown, which will give a vigor to the tree. The fibrous roots will start the same season. The young shoots will start slowly until the second growth—The next season the growth will be greater than of young trees, and the fruit as fair as Western fruit.

The result of the experiment was, the first year I had but few apples; the next I carried to market one hundred bushels of the fairest of apples; the third, there being a heavy gale in the month of August, which blew off about sixty bushels, I gathered some twenty or thirty bushels for cider, and sold that same fall one hundred and forty dollars worth of apples, after putting thirty bushels into the cellar for family use—not mentioning the quantity fed out to the cattle. This was the orchard that had not borne any to speak of for fifteen years previous to this time.

Forms of Pear Trees.

In the *Homestead*, the following list of pears is given as combining the several desirable qualities of the tree and fruit, in a larger proportion than any other list known to the writer.

1. Doyenne d'Ete,
2. Madeleine,
3. Beurre Giffart,
4. Rostiezer,
5. Tyson,
6. Bartlett,
7. Beurre d'Amalis,
8. St. Ghislain,
9. Belle Lucrative,
10. Flemish Beauty,
11. Andrews,
12. Beurre Superfine,
13. Sheldon,
14. Paradise d'Antomne,
15. Lousie Bon de Jersey,
16. Buffum,
17. St. Michael Archange,
18. Seckel.
19. Beurre Bosc,
20. Fulton.
21. Onondaga,
22. Beurre d'Anjou,
23. Urbaniste,
24. Howell,
25. Boussock,
26. Duchesse,
27. Beurre Diel,
28. Dix,
29. Noveau Poiteau,
30. Beurre Clairgeau,
31. Lawrence,
32. Vicar of Winkfield,
33. Winter Nelis,
34. Glout Morceau,
35. Doyenne d'Alencon

The list is arranged so as to be classified in groups according to their ripening qualities, and accordingly we find that the following is given as their classification as they have grown in New England:

GROUP 1.	Summer Varieties;	Nos. 1— 7.
" 2.	Early Autumn;	" 8—11.
" 3.	Mid-Autumn;	" 12—23.
" 4.	Late Autumn;	" 24—30.
" 5.	Winter;	" 31—35.

The trees are again grouped, according to their habit of growth, into *pyramids, conoids, round heads, stragglers,* and *espaliers,* and the following remarks and lists will not be uninteresting to pear growers:

GROUP 1.—*Pyramids*—comprising numbers 5, 8, 13, 16, 17 and 30, of which 16 is perhaps the most beautiful, and 5 and 17, next. Of trees of this group the branches have a vertical tendency, some of them almost as much so as those of the Lombardy poplar.

GROUP 2.—*Conoids*—comprising numbers 1, 11, 12, 15, 18, 21, 22, 23, 26, 27, 28, 29, 31 and 32, of which 23 and 29 are perhaps the most symmetrical. Trees of this group are commonly called upright or conical, but as they are all in fact *conoidal*, the accuracy of our term 'conoid,' more than compensates for its pedantry. The outline of the "head" of many of these varieties is like that of a hen's egg standing on its large end.

GROUP 3.—*Round-heads*—comprising numbers 6, 9, 10, 20, 25 and 35. The trees of this form are generally less pleasing to the eye than those of groups 1 and 2; still, with proper care these round-headed or spreading varieties can be trained so as to be at least good looking. The forms of this group approach those of the apple, as it grows naturally.

GROUP 4.—*Stragglers*—comprising numbers 2, 3, 4, 7, 14, 19, 24, 33 and 34, of which numbers 4 and 7 are particularly straggling and irregular. Most of these trees, indeed, are little better than monstrous sprawling bushes which tax the ingenuity of the most skillful cultivator to train them into anything approaching symmetry. Persons fastidious about appearances, should never plant trees of this class in a conspicuous part of their grounds, for such trees as numbers 4, 7 and 33, will destroy the uniformity of any row in which they may be located.

GROUP 5.—*Espaliers*—These are trees trained flat on a trellis or wall, as is usual with the grape. Those who desire to cultivate in this way, will find group number 2 above, the best adapted to their wants; but trees of groups number 1 and 3 succeed well, also, as espaliers.

How to Prevent the Effects of Late Frosts on Grape Vines.

Mr. Delanque, the proprietor of a vineyard in the Department of Derdogne, France, writes the following letter to the *Journal of Practical Agriculture* at Paris, which we translate for our readers.

"I write conformably to your request relative to the practice adopted at the Southwest to prevent the effects of late frosts on the grape vines. You must note, however, that the vineries of this region are less injured by late frosts than those of other portions of France, that are more elevated, and farther from the influence of the sea, and consequently more exposed to extremes of temperature. If we could so arrange it that the vines would only vegetate after the late frosts, it would be evident that the problem of saving the crop would be solved. We may gain this end, if we select (not the late varieties) but only the branches or shoots which are latest in pushing forth their buds in the spring. This plan, however, can only be used at the risk of losing the best qualities of the wine made from the part, and cannot be generally applied. The influence of pruning, in this case, on the contrary, is constant and general. It has been found that we can retard very considerably the vegetation of the whole vine, by pruning at the time of the latest frosts and when the upper buds or those at the ends of the branches have began to leave out, and have even been injured by frost, whilst the inferior buds in the lower part of the branches are as yet dormant and undeveloped. The cutting-in of the long vine shoots, whilst in full growth, is evidently mutilation of the vine, which is sensibly felt, but we have, by this operation, succeeded in retarding the growth of the buds of the vine for a time, and rendered them safe, from the effects of late frosts, and consequently they are developed with great rapidity, at a time when the cold is not feared. But, you will probably ask, why this operation so simple, so old, and so efficacious is not employed every where and always? That is easily comprehended, when you bear in mind that it is materially impossible in a country exclusively vine growing thus to prune all the vines in a few days, which must be the case, if the remedy is to be generally applied. Our mechanical appliances have not yet enabled us to lessen this difficulty. It results from this state of things that the vine growers, the most convinced of the excellence of late pruning, are obliged to reserve for it only the vineyards of the highest value, and those most exposed to the effects of the late frosts; and this method succeeds perfectly. Reduced even to these modest proportions, the services rendered by this simple method are so great, that it is desirable it should be known and put in practice wherever it is as yet unused."

Beurre de Fevrier.

This is the the name of a new French pear described in the *Revue Horticole*, as originating at Rouen, France. The fruit of the size of a large swan's egg, green, changing to yellow when ripe, with flesh of a greenish white, very delicate, melting, buttery; juice abundant, sugary, sub acid, and very agreeable. The pear is considered as good as the Beurre d'Aremberg, and ripens about February. M. Dupuis, who describes it, says it is a great bearer.

The Chinese or German Aster.

A whole series of varieties have arisen out of this summer plant by the continual industry and attention given to its cultivation, and each variety has its peculiarities; I will here mention them in turn as they have been produced. The progenitor was the plain Chinese Aster, which still exists, but sparely cultivated.

Quilled Aster.—The single petals of the common blossom consist simply of tubes or quills, and the exterior crosses only are blossom-petals which are slightly reflexed; it is from 1½ to 2 feet in height, branches freely, and throws out many large blossoms; its fittest use is for flower-groups in parks or general ornamentation in the flower garden.

Turkish Aster.—This very much resembles the quilled Aster, but it grows only to a height of 1 to 1½ feet, has many branches, and the flowers are smaller than the preceding.

Dwarf Aster.—The individual blossoms of the blossom-tube are partly tube-like and partly leaf like; it reaches a height of from ½ to 1 foot, and is richly covered with moderate-sized flowers; they are principally used for edging.

Globe Aster.—The principal flowers of this Aster are very large, and so arched that they may be compared to a half-ball; most are quilled; high from 2 to 2½ feet; same uses as the quilled.

Pyramidal Aster.—The beautiful large flowers appear on this Aster nearly all of one height; it produces very few side flowers; most probably received its name because it resembles an inverted pyramid; some blossoms are quilled and others not; height from 2½ to 3 feet; same uses as the preceding.

Bouquet Aster.—This Aster deserves its name, for each individual plant is so voluptuously covered with bloom that the green of the foliage is scarcely visible; almost every plant forms itself in a perfect bouquet; height from ¾ to 1¼ foot; highly ornamental in pots; bloom for a long time on account of its great richness in blossom.

Truffaut Pyramidal Aster.—These Asters testify the great care and perseverance the grower has taken in rearing them; there are now five varieties of it:—Fleur Perfection: The flowers of this kind are enormously large; petals very long but slightly reflexed; height from 2 to 2½ feet:—Fleur Bombee: The flowers of this variety are very large and full, and form almost a semi-ball; height from 2 to 2½ feet:—Fleur Chrysantheme:—The flowers of this variety are not so large as the preceding; the petals are entirely reflexed; height about 2 feet; produces more side-flowers than the previously described varieties:—Fleur Pivoine: The Pæony flowered Asters turn their petals towards the centre, and a flower not quite in full bloom resembles a ball; height from 1½ to 2 feet; produces but few side-flowers:—Fleur Imbriquee and Pompone Imbriquee: The leaves of these flowers form themselves exactly like tiles, one on the top of the other to the centre of the flower; the Pompone produces smaller blooms, but of such beauty, that they resemble a perfect semi ball, and being dwarf, look well planted in front of taller kinds.

Giant Emperor Aster.—This variety has sprung from the Pyramidal Aster, and for size and form is unsurpassed. The stem consists in the middle of little tubes; outwardly they are little leaves, and are so regularly formed as to leave nothing to be desired. It bears only a few flowers on a robust strong stem, from which the side-sprouts grow in the form of a candelabrum. In favorable cases it produces five flowers, of which the chief blossom is four inches in diameter; in spite of its size, all its flowers are of an equal height. *The Sowing* of the various sorts of Aster is done from the middle to the end of March, in cold beds, which are filled with good compost earth. The seeds must not be strewed too closely, because the plants require much space to get strong. The windows must be kept close until germination has taken place, and if necessary shade must be given. According to the growth of the little plants more and more air is given, till at last they become strong enough to have the windows open all day in favorable weather; in the middle of May the plants will be strong enough to transplant into their destined place. Asters may also be transplanted in a blooming state if they are carefully lifted out with balls of earth attached, and freely watered when implanted.—*Cottage Gardener.*

The Mammoth Tree of California.

Specimens of this great tree grown from the seed planted in 1853, are now flourishing in England. At Castle Marbys, near Cork, in Ireland, there is a specimen 9½ feet in height and 19 inches in circumference.

HORTICULTURAL NOTES.

Allen's Hybrid Grape.

This grape has not been tried sufficiently to say what are its advantages as an out door grape for this latitude. We have not had an opportunity to compare it favorably with the Anna, but should think it somewhat larger and at least equal in flavor. It is very fine for cold house culture.—*Bost. Cultivator.*

The Bagby Russet.

The *Prairie Farmer* notices an apple by the name of the Bagby Russet, which Dr. Warder pronounces "a truly delicious fruit, a real gentleman's or lady's apple." This apple is cultivated to some extent in Marion county, but its origin is not known.

Cheap and Durable Label.

The best and simplest ink for zinc labels is nothing more than the common black lead pencil.—Some labels marked this way ten years ago are yet perfectly indelible, short of scraping with a knife or scouring with sand.—T. V. P., *in Gard. Monthly.*

Budding with Last year's Wood.

G. Mendenhall of Indiana writes to the *Gardener's Monthly* that he tried last season by way of experiment, to bud and graft a small lot of trees every week till near the middle of summer, from old wood of last season, with reasonable success. Grafts put in after the leaves were full grown grew three feet. He thinks it an excellent plan to fill up vacancies where buds have been frozen out.

Protection of Trees from Mice and Rabbits.

Dr. J. Dinkly, a correspondent of the *Scientific American* from Missouri, recommends rubbing the trees to the height of 18 inches with a piece of raw bloody meat or liver, or blood put on with a brush; he says if this be done in the fall or beginning of winter, no animal will touch the bark during that season; this plan has been followed by him for 30 years and has never failed.

Training Beans.

Lima beans may be gathered at least two weeks earlier if trained on lateral poles, instead of the upright ones generally used. A correspondent of the *Gardener's Monthly* states that he ties on lateral slender rods to the upright poles, and trains the vines to them; in this way he has beans much earlier than when the vine is allowed to run upon upright poles. There is no good reason for this, but it is a fact that has been observed in other vines as well as the bean.

Evergreens.

The *Gardener's Monthly* says that deciduous trees may now be planted out as rapidly as possible, and that evergreens may be set out towards the end of the month. For the latitude of Philadelphia that will do, but here the same time would be equal to the middle of May at least. The same authority says, "we advocate strongly pruning or shortening the extreme points of the branches at transplanting, not only of deciduous trees, but of evergreens also. Of course there is a way to prune without injuring the symmetry or fine form of the evergreen tree, which a little practice will soon teach the amateur."

The Diana Grape.

A New York culturist of this grape says, "for many years this grape has been a special favorite of mine, and I am prepared to endorse all its most enthusiastic friends have said in its favor. No grape grows stronger, or bears the intense cold of our winters better; nor do we know of a case where a vine of this kind has been winter killed; it is productive to a fault, and never suffers from the rot or mildew. It is earlier than the Isabella, and much superior in quality to that esteemed variety, and will hang long on the vine, gradually improving in flavor and beauty. Firm and well adapted to store for winter use, the clusters have been found as fresh and perfect in April as when first taken from the vine."

How to Preserve Fence Posts.

At a recent meeting of the Farmer's Club in Hudson, New York, one of the members exhibited a post which previous to being placed in the ground, had been soaked in a solution of blue vitriol—one pound of vitriol being used to twenty quarts of water. The post was pine, and when taken up was as sound as when first put down, eight years since.

This solution is good for all kinds of timber exposed to the weather—spouts, shingles, stakes, bean-poles, etc.—*Homestead.*

Experiment with Corn.

A correspondent of the New Hampshire *Journal of Agriculture* writes:

"First, I took 2 gills of corn and mixed with one gill of soot, and water enough to moisten it. Next I took two gills of corn, and an equal amount of water, and let it stand through the night. In the morning I took two gills more of corn, and an equal amount of water, and let it stand one hour. I then had the corn dropped and covered as near alike as possible. The result was as follows:

That which was planted with soot came up three days before that which was soaked the same length of time without soot, and four days before that which was soaked an hour. After the second time hoeing, the difference in colors, as well as height, could be told fifty rods distant. That which was planted with soot was of a dark green color, and the other was of a lighter hue. In the fall that which was planted with soot was ready to harvest two weeks earlier than the other, but didn't produce any more or better looking ears than the other."

More About Lime and Clay.

Mixtures of the lime with earthy bodies will require two or three turnings, according to the original state of the materials—if they be coarse and lumpy, or fine and easy of reduction. After every motion has ceased by reason of the non-generation of heat, the materials will become a saponaceous unctuous mass, and will afford a mucilaginous manure, which is easily decomposed, and applicable to any purpose of fertilization. The period of time of one year, at least, is required to produce a mass of mild and easily soluble materials from the agency of caustics on the crude and harsh earthy forms that contain both volatile and fixed principles of very inveterate hostility. When the mixing of the different bodies is done in summer, the compost will be ready for application in the autumn of the next year, after the hay crop is got, or on pastures somewhat later in the season, when the cattle are housed. An equally good season occurs in the early spring, before the grasses begin to rise; but the period of autumn may be preferable in the compost affording shelter during winter to the grassy herbage, and producing an earthy bed for the spreading of the fibrous roots. In laying composts over grass lands of old or young duration, carts with broad wheels must be used, with a tire of at least five inches in width. The composts must be spread from the carts by two persons provided with shovels, one on each side, to the right and left, over a space of ground in three yards of width to each person. When the earthy mass is laid on the ground in heaps, and afterwards spread, the bottoms are difficult to be cleaned out, and a tuft of herbage grows from the extra quantity of manure that is left on the spot. By spreading the compost from the carts a superior evenness is obtained, and the work is finished at once.

After the compost has been laid on the surface of the ground, in order to expose the cloddy particles to the action of the atmospheric changes, the bush-harrow will be very usefully applied in breaking into small pieces the lumps which will be formed, and in tending to distribute the mass equally over the ground. For this purpose, the harrowing must be done across and lengthwise, so as to act in both directions. When the surface has become thoroughly dry, a heavy roll must be applied, which will level all inequalities, and press together the earthy compost and the roots of the plants. The roll must be very liberally used both in the autumn and in the spring; one, or even two, applications may be sufficient to produce a close bed for the roots of the plants in contact with the manure, and also level, against the penetration of drought.

The quantity of such a compost manure to be used on an acre may be stated at the average of forty one-horse-cart-loads, and at the cost of 25cts. per load, or $20 per acre. Very much of the effect of all manures is lost from want of quantity: the chemical combination of bodies is often produced by the addition of one or more substances, which alter the mutual relationship; and in changing state, they also change capacity. Different effects are often produced in different situations; and the quantity and degree of the exertion of the power depend on various changing circumstances. Besides the quantity and quality of the substances, much influence is exerted by temperature, by electricity, and by mechanical pressure, by insolubility, and by other causes arising from peculiar circumstances.

The compost manure that has now been described, being a cool mass, will be best used in cool weather, when the solubility will not be too much hastened by violent heats, nor be retarded by the pinching colds. A gradual decomposition will best answer the purpose of the assimilation of the elements to the condition of the food of plants.

The value is very great of earthy composts prepared in this way, for being used as top-dressings on grass-lands of all kinds, and also on fallow lands. Not only the common herbage is increased in one-third of the average produce, but the quality is very much improved by the invariable result of grass-plants of a better kind being brought forward, and established on the ground. It is a very beneficial practice to sow the seeds of the better grasses on the top of a liberal application of a rich earthy compost, to harrow the surface, and then to press the seeds firmly into the ground by means of a heavy roll. Inferior grass-lands are very much improved in this way, and at a very moderate cost in the purchase of the lime and the price of the grass seeds. In every case of application, the compost of lime and earth is much superior in effect to lime by itself, especially on lands of an inferior quality. This fact has been settled beyond all dispute, and arises from the earth of the compost imbibing and retaining the caloric imparted by the lime, by which the future crops are more benefited than by the weak soil that is devoid of the quality of using caloric. Lime, in any condition, only raises the temperature of the ground in the form of benefit from its use.

The burning of clay for the purpose of being converted into a manure has been often tried with much vaunting confidence. By the application of a smothering fire the earths are divided and reduced into very fine particles, and invested with an unknown property, which substances acquire that have undergone the action of fire. In this state it is supposed to attract and retain ammonia, that is conveyed to the soil by rain-water, and thus affords to plants the nitrogen contained in the ammonia or volatile alkali. Clay is the oxide of "aluminum," one of the newly discovered terrigenous metals, and is composed of silica, alumina, oxide of iron, and some little inflammable matter; and probably some other substances, but in a very minute ratio. The combination of alumina with the oxide of iron produces the well-known earthy smell of clays. An oxide is heavier than the primitive body, by reason of the quantity of oxygen which has been absorbed. The action of fire on clay will oxidize the residual calces that compose it, and must contain none of the elements of vegetation—a property which belongs to all bodies that exist in that state. Very much, if not the whole, value will consist in the composition of the clay itself; and when it is taken from the surface of the ground will contain both animal and vegetable matters, and the ashes will be of the usual nature after burning. The practice of burning clay by itself has wholly sunk in repute, as it never had any legitimate existence on scientific grounds. A metallic base that has been divested of every other ingredient can form no fertilizing substance, and the preparation adds very considerably to the lessening of its value. On the other hand, alumina has an affinity for lime, and hence the very beneficial results that attend the reciprocal action, and which arise from the combination.

On the subject of using clay it may be added, that the clods of clay-land fallows may be very advantageously pulverized by being laid in heaps, and mixed with the cinders of hot lime, and which are dissolved by exposure or by the application of water. The damp heat evolved by the lime will produce a smothering effect on the clay, penetrate the viscid mass, and impart a fertilizing property to the mixed substances. The lime and the clay will be pulverized together, and most minutely blended, and mixed in a manner that is otherwise impossible. This mode of using clay has been seldom noticed; but of the value of the application no doubt can be entertained.

Clay has been laid on longitudinal heaps of hot dissolved lime, and it is benefited by the penetration of the damp vapours from the bursting of the cinders; it is afterwards removed, and used as a manure. Little, certainly, is known of this method of using lime. The quantity of lime must be very considerable, in order to pierce and crumble a tough mass by means of damp exhalations. The duration may be doubted of the fertilizing quality that is communicated to the clay by the volatile elements of the caustic lime.

In mixing clays with lime, in order to form the compost as now recommended, the special attention must be directed to the placing the clay and lime together in the hottest possible state after the lime has been burned. The dissolution of the cinders by the effect of moisture evolves much heat, which penetrates and crumbles the tough harshness of the aluminous mass, and reduces it to the condition of being combined in a milder and more useful form. If the lime be allowed to lie exposed, and becomes mild, it loses the character of a caustic solvent, and assumes the state of an earthy ingredient. In this from, it does not act on other bodies, and enters only into a mechanical mixture with substances that are pulverized in a similar state. The clay is usually in the form of clods and lumps, and requires a powerful solvent, in order to disintegrate the mass and sunder the particles. If this reduction be not effected, the lime merely adheres to the outside of the clods; no combinations are effected, and no results are produced by the union of the different bodies. It is an object of the very last importance that the ultimate elements of bodies are brought into contact at insensible distances. The surface of one body being presented to the aggregated mass of another substance, affords no opportunity of reciprocal action; the distance is much too great; and the efficacy of combination is in the inverse ratio of the affinity of aggregation; and the greater the latter power is, the less efficacious will be the power of composition. Hence pulverized lime, being brought into contact with lumps of clay, can exert no useful influence, and merely gilds the clods with a whiter varnish than they before possessed.—This principle is equally applicable to the use of lime on rough fallows. The lime is in fine particles, and the land in large pieces; and, consequently, no reciprocal action can happen. The lime is powerless from want of opportunity, and the soil is formed into masses which admit no influence of exterior action. Hence it would answer a very beneficial purpose to form heaps of the clods of clay fallows, mixed with lime-cinders, which, by bursting and evolving much heat, would penetrate, crumble, and pulverize the clayey lumps, and reduce them to ashes, and mix with the granulated particles of the lime in the most extreme comminution. Peat may also be reduced to ashes by the hot cinders of lime; and during the process, some useful combinations may happen between the lime, the clay, and the mass. Bodies that undergo, in conjunction, the powerful influence of fire, will have a better opportunity of forming new states of existence, than when brought into contact after the action has ceased, and the mutual change of condition has taken place. The susceptibility is cooled by exposure, and the homogeneous qualities are quickly lost, which enable bodies to attract each other, and to enter into combinations. Fire is a most violent agent; and the result of its action must be applied immediately on being produced, and before the nature is altered and neutralized by the introduction of adventitious elements. In the case of using lime and clay in conjunction, the quick use of the lime in the hot, caustic state, is the primary consideration, forming the useful compost by mixing the two substances.

A compost manure of clay and lime is very generally accessible to the farmer; and the results of its action as a top-dressing on grass-lands, and as a manure on arable grounds, are certain and durable almost beyond any other substance that is used, in the first case of application. Composts of lime and earth are very superior in effect to lime itself, on inferior soils; and on grass-lands, the duration exceeds any other top-dressing. The two properties—general accessibility, certainty and duration of effect—constitute a very powerful recommendation of use.

Treatment of Leicester Sheep.

In a late number of the *Country Gentleman* we find the following description of the method in which sheep are kept by a farmer of Albany county, New York, with the same time a very noticeable record of their weights, and the gain made within a given time. As this is a point on which it is difficult to get a reliable record from farmers, we think it worthy to note:

"The extent of accomodation Mr. Winne finds necessary for sheep, may be inferred from the dimensions of one or two of these sheds. There is one for example 21 by 36 feet, with a narrow yard along the southern 6 to 8 feet wide, where a lot of 75 sheep were thriving very nicely. A board on the north side near the bottom, is hung on hinges, and remains open for the admission of fresh air except during the most severe weather. The whole south side along the yard is open, but provided with two or three sliding boards to restrain the sleep under shelter when necessary. Others of the sheds have much larger yards and others no yards at all. But Mr. Winne is careful in any case to provide amply for ventilation—for the admission and circulation of the atmosphere—a point justly considered of the greatest importance, while, if it is sufficiently attended to, yards do not seem to be necessary—the sheep evidently thriving quite as well without them as with them. When yards are provided, however, the same amount of shed room will answer for a somewhat larger number of sheep. Seventy sheep were kept in a lean-to 20 by 46 feet, with no yard, ventilated by an open board along the side as before, and two trap-doors of considerable size in the roof, opening and shutting at will. This shed might have contained five more sheep without crowding; in that case allowing about 12½ superficial feet to each sheep, while in the shed with the narrow yard attached, 10 superficial feet under shelter had been quite enough.

In January 504 of the sheep weighed 72,198 pounds aggregate, or an average of 143¼ pounds each. February 3, when the whole 507 were weighed, the aggregate was 76,273, showing an average of about 150½ pounds per head, or a gain in an interval of less than 30 days with more than half the number, and just a month with the remainder, of 7¼ pounds per head throughout. About six weeks had elapsed since the last weighing at the time of our visit, so that 10 pounds per head would be probably no more than a fair average gain in this interval; and 500 sheep, as even in size and condition, and as handsomely fatted as these, *averaging* 160 *pounds per head*, are really quite a sight to see.

The evenness of the lot was not such, nevertheless, as to render a dozen of the best unworthy of a paragraph by themselves. There were thirteen which showed an aggregate, Feb. 3, of 2,955 pounds, or an average of 227½ lbs. per head—the lightest turning the scale at 205, and the heaviest at 252.

The sheep are Leicesters, and come from Canada, costing upon the farm, all expenses paid, a not extravagant price. Strongly in favor of grinding the grain fed to either cattle or horses, Mr. Winne does not think it either necessary or expedient with the sheep. Among the 500 head he distributes for the morning feed about eleven bushels of corn and oats in equal proportions, varying the amount slightly, according to the particular circumstances of the case, such as weather, &c. After this they are supplied with what hay they want, and subsequently with water. About 11 o'clock they get a supply of oat straw, which is this year very bright and nice, and relished by them as well as hay. At 1 o'clock two bushels of sliced roots per 100 sheep, are fed to them, and all their tubs and barrels are again supplied with water. The night food consists of 11 bushels for the whole, of peas and oil-meal, half-and-half. To contain their water, tar barrels are used, or if these fail, a little tar is put in with the water they drink. Salt is always accessible to them in one trough, and in another a mixture of two parts salt with one part ashes and a handful of rosin to two quarts of the above, with the addition sometimes of a little nitre.

With these precautions he has had remarkable success in maintaining the constant good health and thrift of the whole. The roots that are fed contribute to keep the system in order, rather than to add flesh, in Mr. W's opinion."

Editorial Notices.

☞ We call attention briefly to the offer of well bred stock for sale, which will be found in another column. The advertisement was received too late to do more this week than merely direct attention to it. We shall speak more particularly of it next week.

☞ The Northville Foundry of C. G. Harrington is prepared to furnish and repair all kinds of agricultural implements, mill work, and to fulfill orders for machinery. We call attention to the advertisement in another column.

☞ We call attention to Wheeler, Melick and Co's advertisement of railroad horse-power, thrashing and grain cleaning machinery and saw mills. This firm has now been manufacturing these machines for a long series of years, and have obtained the confidence of the community by the excellence of the work, which has stood the test of a long trial. We shall have something more to say on the subject of these horse powers in future numbers.

☞ Amongst the home firms whose operations are doing much to extend the use of the best implements and machinery amongst the farmers of the State, that of Waters, Lathrop and McNaughton of Jackson deserves attention. It will be seen that they afford a large variety of the very best implements, and the scale on which they manufacture them, enables them to supply customers at the lowest rates.

☞ Mr. Eldred, it will be seen, offers the services of his stock to breeders. The Jack Black Hawk is a powerful, well muscled animal of large size, and is a good stock getter. Kemble Jackson is well known as a large powerful horse of superior action, and style that has been shown with success at the State fair. He is of the Jackson family of the Bashaw stock, and possesses many of their most valuable characteristics.

☞ P. B. Sanborn, the agent for Cahoon's seed sower, has it for sale, as will be seen by his advertisement. We spoke favorably of this machine last year, and many who have tried it, and whom we have since seen, have confirmed the opinions then expressed. The hand machine is particularly useful for sowing grass and clover seed, and those who possess it say they would not be without it for twice its cost. On land free from stumps the horse machine will do the work of four men in sowing broadcast any kind of grain.

☞ The St. Louis association have offered premiums to the amount of $20,000 for their fair of next season, and of this fifteen hundred dollars is offered for the best stallion. Every exertion is being made to render the next fair superior in many respects to any that have yet been held.

MICHIGAN FARMER.

R. F. JOHNSTONE, EDITOR.

SATURDAY, APRIL 7, 1860.

Editorial Miscellany.

☞ We present a very interesting letter from a valued correspondent on sugar making in Tuscola county, which we are sure will be read with much satisfaction.

☞ James Waters has shipped his steam plow for Illinois, for the purpose of performing contracts for plowing made last fall. During the winter he has made many practical changes and alterations, and has perfected his machine, as well as constructed a system of plows better suited to the work than those which he used last season. We have not the least doubt but we shall hear a good account from him, and of his work.

☞ The communication of H. C. Gilbert on the use of common tar on trees and young trees at that, is very acceptable at the present time when very many questions are asked as to the use of specifics to prevent the attacks of vermin and insects. Mr. G., is quite an extensive cultivator of fruit, and has given the subject much attention as an amateur. We shall be pleased to hear from him again. If a few more of our fruit culturists would make known these observations, and the results of their practice, the condition of fruit culture would be better understood than it is at present.

☞ The sporting world promises to be severely tried by the series of contests between the stallions Ethan Allen and George N. Patchen. The first match is to be mile heats best three in five in harness, and is to take place on the 16th of May, if a good day and a good track, if not a good day and track, on the first day thereafter when these conditions are fulfilled. The second match is to be mile heats best three in five to wagons, on the 23d of May, or the day after when weather and track permit. The third match is to be two mile heats in harness on the 30th of May, or the day after, when track and weather will permit. Each of these matches is to be for $1000 a side; and will be a great contest between the Black Hawk or Morgan blood and the celebrated Bashaw stock.

☞ Our readers will perceive that Kirby's American Harvester is in the field for the season of 1860. When visiting Plymouth some time since we had an opportunity of examining very fully both the model of this machine, and also a one-horse mower, and the two-horse machine on the farms of Mr. Wm. Taft and of Mr. Allen who, it will be noted, are the agents for the machines. For strength, durability and simplicity, these machines most certainly deserve the high reputation they have achieved. Both Mr. Allen and Mr. Taft are themselves practical farmers of the very best kind, who have that mechanical taste and experience, which leads them to try all sorts of implements that many commend themselves to their notice, and which makes their judgment and recommendation of value. Mr. Taft, last year, made some four hundred gallons of sorghum syrup, of most excellent quality, and which we tested in the most practical way at his house, on the hottest of cakes, and we found it as pure and as sweet as the celebrated "Stuart's Golden." He sold the most of the syrup thus made at the rate of fifty cents per gallon. In making this he employed the best machinery he could find, and very successfully. Whilst there, a very simple machine was shown us for sowing plaster broad cast, made by S. Stanbro of Summit This machine is worked like a wheel barrow, is of small cost, and is made so as to sow the plaster or seeds broadcast ten feet wide, and its delivery can be regulated to sow more or less, as may be required. A very excellent three toothed corn cultivator, improved upon the pattern made by Mead and Ramsdell of Plymouth, and of which great numbers were sold last season, was shown us. We learn that Mead and Ramsdell have made some important improvements in their implement, giving it more firmness and strength. One of these which we worked last year was found excellent for corn or potato cultivation.

Premium Crops.

It will be noted that we publish in this number the premium list of the State Society for crops. We call the particular attention of farmers themselves to this list. It has been adopted and is issued for the purpose of eliciting information in regard to practice and results in this State that cannot be obtained outside of it on account of its peculiar soils and climate. The Society have raised the premiums in amount, and have not offered any second premiums this year. In making preparations for competition, the details of management should be recorded with as much exactness as possible, and in fact a diary of the field or plot should be commenced and carried on during the whole growth of the crop and until it is secured, which should contain the observations made upon every point of interest that comes under the notice of the competitor. In the division of root crops, it is particularly desirable that the information should be very full on every proceeding connected with the preparation of the land, the sowing of the seed, the amount of thinning out, hoeing and culture given to the growing crop, and also the securing of the roots for the winter and their use. The economy and great services which root crops perform in affording the means to keep more stock, to accumulate more manure, and thus to promote a more general consumption of the rough forage that would otherwise be wasted, are not as well or as generally understood as they deserve to be, especially in this State where the grain, grass, and corn crops are liable to be cut off, and thus to lessen the resources of the farmer for feed during the long winters. In the growth of root crops for use however there has been a decided advance lately, and all those who have once had the experience of their assistance in feeding sheep and cattle, are unwilling to be without them. Mr. Alexander Crawford, of Commerce, last year informed us that he grew in drills three acres of rutabagas, and during the past winter they have enabled him to maintain a flock of Leicester sheep, and his cattle in a condition that has excited the admiration of the neighbors, and has also incited many to follow his example. He would not now do without roots, even if all his other crops proved a success. It is desirable, therefore that the practice of those who are most successful with these crops should be made known, and the Society recognizing this fact have offered inducements, which we hope to see call out a large mass of information.

The Town Elections.

There is not much to be said as yet about the town elections; both sides feel good "in spots." But as the "noise and confusion" have not yet been quelled, nor the slain, wounded and prisoners been made out, there is no saying as yet which side has really the best of it. The localities heard from, taking the supervisors as the test, show but little alteration so far as whole counties have made returns.—Oakland county is reported same as last year. Shiawassee seems to have made a change in favor of the republicans. Whastenaw remains about the same. Here the city of Ypsilanti has elected B. Follet, Esq., a democrat, Mayor, by a very handsome majority; and certainly no man better deserves the honor; for there are few men anywhere more imbued with a liberal and well-directed public spirit, or who have shown on all occasions a more generous zeal in promoting the improvement, the progress, and the interests of Ypsilanti, than the Mayor elect. In Adrian and Grand Rapids, however, the republicans have made gains that console them in some degree for the loss of Ypsilanti. The western counties seem so far to balance each other without affecting the general result.

New Books.

CYCLOPÆDIA OF LITERARY AND SCIENTIFIC ANECDOTE, is the title of a new work recently published by Follett, Foster & Co., of Columbus, Ohio. It is a compilation of sketches, anecdotes, and incidents illustrating the characters, habits and conversation of men of letters and science, and is edited by William Keddie, Secretary to the Philosophical Society of Glasgow. The volume contains full one thousand personal, historical or scientific anecdotes, some of them very entertaining and instructive. We intend to draw upon its pages now and then as we may have occasion for variety in the Household, but would commend the book to those who would make themselves familiar with the characters of authors, male and female, and with the arts, sciences and walks of literature with which their names are identified. It is for sale by Francis Raymond, Detroit.

SCHOOL DAYS OF EMINENT MEN, *by John Timbs*, author of "*The Curiosities of London*," &c, is another volume from the same publishers, and for sale also by F. Raymond, Detroit. This is a very entertaining volume, tracing the progress of education in England from the time of the early Britons and the schools of the Druids down to the days of Queen Victoria. The education of each sovereign, his early habits and tastes are described, and their influence upon the people; also the progress of the establishment of systems of education under each successive reign.—The second section of the work is devoted to anecdote biographies of the early lives, the school and college days, of eminent men who, by their genius, learning and character, have shed luster upon their name and country. These brief, pithy biographies make the volume valuable as a work of reference. It is a literary cyclopædia of itself, and the style of the sketches is such that it cannot fail to be attractive and pleasing to the young.

ADELA, THE OCTOROON.—A great deal of praise has been lavished on this book, mostly by way of advertisements, we imagine, or by editors who are so thankful for anything in the shape of a book that they rob the dictionary of superlatives to express their gratitude to the publisher, and their appreciation of the author's genius. Adela professes to be a story of southern life, slave life, more particularly, but there is not a genuine slave or southern character in the book. The story itself, as far as the heroine is concerned, is beneath criticism, being unnatural and improbable in incident, and very weakly made upon and miserably put together. The main object of the book, as we take it, is to show the author's familiarity with, and his opinion of, the great men who figured in Congress at the passing of the Fugitive Slave Law.

The work is published by Follett, Foster & Co., Columbus, O., and or sale F. Raymond, Detroit.

Literary Notes and News.

The Atlantic Monthly.—A correspondent of one of our exchanges is visiting Boston, and writes back for the enlightenment of his western friends that he is at the centre of New England literature, and that the *Atlantic Monthly* is the culmination of its talent and genius. We should think its poetical genius had culminated in the astonishing poem entitled "Bardic Symbols" in the April number of the Monthly. Of the eighteen stanzas it contains, here are two of the most sensible.

VII.

"Oh, I think I have not understood anything,—not a single object,—and that no man ever can!

VIII.

I think Nature here, in sight of the sea, is taking advantage of me to oppress me,
Because I was assuming so much,
And because I have dared to open my mouth to sing at all."

Well, who could blame her, after being compelled to listen to such singing?

The remaining contents of the Monthly are, perhaps, quite equal to those of its predecessors; all keyed up to the Boston pitch, the culmination of Americo Athenian literary genius.

Blackwood's Magazine.—This popular monthly for March is received. The contents are, Lord Elgin's mission to China and Japan; St. Stephens—part third; Norman Sinclair—part third; Nelson and Caracciolo; Betsy Brown, a true story; A Word about Tom Jones; The Luck of Ladysmede—part the last; The foreign connection of the House of Bull; Dies Iræ; Volunteer cavalry movements; The Anglo-Gallican Budget.

Republished from the foreign edition by Leonard Scott, New York, at $3 a year.

Hall's Journal of Health, gives the following varieties for April. Bread and Milk; Nature's Laws; National Dietetics; Thrift and Health; Averting Disease; Crazy People; Neglecting Colds; Mistaken Benevolence; Wise Charities; Nicholas of Russia; Worth remembering; Care of the Feet; Regulating the Bowels; Sour Stomach; Sleeping.

The Doctor's table is always set with a great variety, and highly spiced at that, notwithstanding he constantly advises plain diet. Once a month he spreads his feast and invites his company by the year at only One Dollar each.

The Home Monthly.—The *Home Monthly*, published at Buffalo, N. Y., by Messrs. Arey and Gildersleeve, and edited by their wives, Mrs. H. E. G. Arey, and Mrs. C. H. Gildersleeve, is one of the best household magazines on our exchange list. The aim of every article in its table of contents is to refine and elevate the home influence of fathers, mothers, brothers and sisters; to teach them 'the more excellent way." It contains home sketches, tales, poetry and very useful chapters on the various departments of household economy, health, and so forth.

Subscription price, $1 50 a year.

We acknowledge with thanks the receipt of the back numbers from January.

From the Pacific.

The mail from San Francisco via the overland route, bringing dates to the 11th March, has been received at Mallory's station.

The San Francisco mint has been occupied in coining double eagles.

The Washoe silver mines are turning out of fabulous richness. Thirty tons of ore had been smelted at the chemical works at San Francisco, and gave a return of over $3,000 per ton. Companies are being organized to work the Nava quicksilver mines, and openings had been made at six different places. Laborers were being in demand.

The quartz in the mines of Jackson county, Oregon, continues to yield immense profits, being valued at $20,000 per ton. A dispatch from Yreka states that a ledge of almost solid gold had been found twenty feet below the surface. One of five partners had been offered eighty thousand dollars for his fifth, but he had declined the offer.

Political Notes of the Week.

—The whole interest of the week is centred in the town elections of the State and the State elections of Connecticut and Rhode Island. Nothing else is talked about. Even the preparations for Charleston sink into a temporary insignificance compared to the results in the State where the people are pelting each other with political "wooden nutmegs."

—The late message of the President, protesting against the appointment and action of committees appointed by the House of Representatives to investigate certain charges of corruption, seems to have created considerable discussion as an infringement of the rights of the House. The friends of the President do not seem to consider it a very wise step, especially as the attention of the House had been called to the matter to be investigated by the President himself.

—It does not yet seem certain that Kansas will be admitted into the Union as a State at this session of Congress. The proposition to admit is opposed on the ground that the Wyandotte constitution was not formed and presented in accordance with the law relating to the admission of Territories as States.

—Col. Brown has written to the war department that all the reports relative to Cortinas and his band have been largely exaggerated and magnified by parties who are interested in fomenting disturbances, and who believe that Uncle Sam is a great goose, that is only fit to be plucked that somebody may repose on downy couches.

—It is thought that bills will be passed at the present session of Congress to authorize the States concerned to collect tonnage duties from the vessels navigating the St Clair flats and the mouth of the Mississippi, which are to be applied to the improvement of the channels.

—Several citizens of Charleston, and some of the hotel keepers have visited Washington, where they state that the impressions sought to be circulated of onerous charges, are false and without foundation. No undue advantage will be taken of delegates or other parties who may attend.

—Mr. Ford, the printer to the House, has purchased the printing establishment of Cornelius Wendell, taking it at invoice price. It is said that he will start a republican paper at Washington which will support the Chicago nomination.

—The nomination of Judge McLean is said to be pushed by the National Union party, with a vague idea that it will have the effect of making him the nominee at Chicago. The proposition seems to be one of those nest eggs that are sometimes hatched in the brains of availability politicians at Washington.

—The pro rata bill, which was to tax the roads of New York for the benefit of the canals, has been defeated in the Senate. This is right. It is too late in the day for the adoption of measures which would have the effect of closing up the business of new routes, and giving the whole business of the west to rival lines of communication.

—A great demonstration is being made against the reciprocity treaty with Canada. The business men of New York are bestirring themselves for its repeal. We do not think that our Michigan men should remain idle while this important measure is about to be repealed. We believe it is found to work very advantageously for this State.

—The people of Missouri are suffering from the effects of electing a totally unfit man for Governor. The railroad bill, which was passed by both houses and as a financial measure, independent of party, was sustained by all parties, seems to have been vetoed by the executive whilst in his cups, and under the influence of antagonistic interests. He has issued a call for an extra session, but it is doubtful if the members will attend.

—The election in Connecticut has been held and the republicans have carried the State; for the Governor, Buckingham, the majority is very light, showing a very close struggle. The Legislature, however, shows a very large preponderance of the republican element, the Senate having 13 republicans to 7 democrats, and the Representatives being 142 to 89. Both sides feel happy; the republicans being uproarious that they have elected their Governor by a small majority, and the democrats in extacies for the same cause. It is a clear evidence that the people fraternize and that union and harmony prevail.

—The Miramon steamer capture seems likely to prove the occasion of much controversy. Dispatches have been received at the navy department, from the commanders of vessels of other nations, making inquiries as to what provision of international law it was under which the steamers were attacked and captured. Marin, the commander, has made a written statement that, knowing the steamers Indianola and Wave to belong to Juarez, and consequently inimical, and it being night, no flags flying on either ship, he supposed the visit of the boat bearing the flag was a boat attack, not seeing the flag of the United State, when his steamer fired.

—The expulsion of non slaveholders from Kentucky is creating some trouble in that State. The telegraph reports state, "Cassius M. Clay publishes an appeal to the people of Madison country against the revolutionary committee of that county, from whom he escaped denouncement by a small majority last Tuesday, and who were to consider his case again yesterday. He says he advised Hanson and associates to leave; that he has discountenanced the radicals; but, if republicans are attacked, they will defend themselves. His appeal embraces a letter signed Frank Bland and George Haley, in which they say that the troubles did not originate about Hanson, but because Geo. West, sick with the consumption, was maltreated and West's daughter insulted with gross language. Clay concludes: "You may be strong enough to overpower me; you cannot drive me from the duty which I owe to myself, to my friends, and to my country. If I fall I shall not fall in vain, and it will be enough for all long cherished associations if perchance my blood shall atone for the wrongs of my race, and these States shall at last be free."

—Thomas W. Dawson has withdrawn from the Louisville *Democrat*, a Douglas paper, and is about to publish a republican paper in Clay county. We believe this will be the only paper of that political creed in Kentucky.

—The New Jersey democratic State convention was held last week and a full set of delegates sent to Charleston. These delegates do not seem to be committed by resolution of preference for any candidate.

—A bill for the suppression of polygamy in Utah will be brought up in Congress.

—The bill for a telegraph to the Pacific, which has passed the House, is now under consideration in the Senate.

—The elections in Atchinson and Leavenworth, Kansas, resulted in large majorities for the democratic candidates.

—Hon. Howell Cobb has written a letter withdrawing his name from the list of candidates for the presidential nomination.

—Mr. Van Dyck has been removed from the office of District Attorney at Philadelphia. This removal is looked upon as showing a determination on the part of the President not to keep in office those who differ from him in opinion relative to the nominations of the national candidates. Geo. L. Wharton is nominated as successor to Mr. Van Dyck. We have had rumors here that Mr. Walker was also to be removed, but do not believe there is any foundation for them.

—A constitutional union party has been initiated at Boston. No advices have as yet been given as to whether they will have a live or a dead candidate for the presidency.

—It is stated that the K. G. C., or Knights of the Golden Circle, number one thousand at New Orleans, and are making preparations to ship to Mexico, with the design of taking part in the civil war. Of course these young men are quite disinterested.

—The *Plaindealer* of Cleveland estimates that Mr. Douglas will receive 128 votes certain on the first ballot at Charleston.

—The State of Rhode Island has elected Mr. Sprague, the democratic candidate for Governor by about 1,700 majority.

General News

Michigan State stocks bearing 6 per cent. interest sell in New York at $1.01

—A fugitive slave case has created some excitement at Philadelphia, and a number of persons were imprisoned.

—Adaline Patti, the young vocalist is to be complimented by a benefit at Washington, at which the Vice President and the two Houses of Congress are to be present.

—A negro girl in Charleston, S. C., has been committed to prison for robbing the mails of money to the amount of $3,500.

—Barnum, the great show man, has cleared off his liabilities and once more resumed his place at the head of his museum. We think he should now travel round and show himself.

—Another tenement house has been burned in New York, and ten persons were consumed in it, whilst a number were injured in their efforts to escape from it.

—The increase in the business of the Great Western Railway for the week ending the 30th of March, over the same week of last year was $5,845.07 in the receipts.

—Steamboating between Detroit and Port Huron has opened, with quite a lively competition between the several boats.

—Lola Montez delivered her two lectures on England and on Fashion in Detroit during the week. She had very large and fashionable audience.

—An English ship's crew have been massacred and eaten by the savages of one of the Polynesian Islands.

—A number of persons, the guests of a person named Lemley, of New Orleans, were poisoned by his cook.—Three persons have died.

—An English paper states that Louis Napoleon has recently been ill, suffering it is supposed from the effects of poison.

—The Ypsilanti *Herald* says that iron ore in large quantities has been found on lands of William Barr, near the county poor house of Washtenaw.

—Salt works are being erected at Grand Rapids, and the manufacture of salt will be prosecuted with great energy there during the season.

—Dispatches for the pony express to California are now regularly forwarded by the telegraph companies.

—Julian the celebrated conductor and musician is dead.

—The Prince of Wales is not to visit Canada until the 10th of July. This was officially announced in Canadian parliament.

—Two of the subordinate officers of the Knights of the Golden Circle have published a card denouncing the commander-in-chief as an impostor. Fifteen hundred men have been enrolled under the representation that there were ample means to forward them to the assistance of the Juarez party in Mexico, where land grants were to make their fortune.

—Jackaloo, the Chinaman charged with murder on the schooner Spray, near New York, has been fully committed for trial. So has the man Johnson, or Hicks, who is charged with the murder and robbery of the captain and two boys, in the oyster sloop picked up near New York.

—Nena Sahib, the leader of the Indian mutiny, is reported to be dead and buried. The truth of this report has been in doubt for some months, but is now confirmed.

—The great breach of promise case at St. Louis has been decided against Miss Carstang. The lawyers are moving for a new trial, on what grounds is not known.

Buy Ayer's Cherry Pectoral for Coughs. Ayer's Sarsaparilla for Scrofulous complaints, and Ayer's Pills for all the purposes of a Purgative Medicine.

The Household.

"She looketh well to the ways of her household, and eateth not the bread of idleness."—PROVERBS.

EDITED BY MRS. L. B. ADAMS.

PUMPKIN PIES.

You may boast, Miss Nell, of beauty bright,
Of rosy lips and sunny eyes,
These are your charms, but I have none,
Yet I can make good "pumpkin pies."

Oh, wealth and friends may be your lot,
Like heavenly bliss your days glide by;
My dreams of future love and fame
Are when I make a "pumpkin pie."

I do not write to men so wise.
Tho' I presume a thought will rise,
Of cheerful home and loving wives,
One that can make "sweet pumpkin pies.'

Noble Centre. MARY M. WILLSON.

Editorially Speaking.

It is gratifying to see the spirit and true womanly feeling with which our correspondents have taken up and treated the cases of gentlemen Farmer and Stunner. Mrs. Meechum, in our last number, was rather ultra in her views of husband-ruling, but we could not deny her a hearing, if for no other reason than as an offset to the redoubta e Stunner who appeared to think himself master of the subject of women's duties as well as of his own wife. Whether he will have anything farther to say remains to be seen. We commend the excellent remarks of Harriet in to-day's paper to the careful attention of both Mrs Meechum and Mr. Stunner. Also, young men, if any such chance to look into this department, may take warning from the spicy tone of Bell Clifton's letter, that it may require even more than three years to tame some women.

The patent churn experience of a "Farmer's Wife," accords very well with some experiences of a similar nature that have come under our notice within a year or two past.—Churns have been shown here in the city, that would make butter in three minutes from new milk. We went to see them, and saw the sweet milk poured in by pailfuls, and the butter came within the time specified. *Butter!* It was anything *but* butter, that sweet, waxy, yellow, delicious substance that we used to gather in great lumps from the old wooden churn that was "big at the bottom and little at the top"! It was more like a sort of refined soap-grease, both in taste and consistency, than it was like butter. We do not believe all the salt of Syracuse, Saginaw and Grand Rapids put together would make it "keep"—as butter. And then the churning or rather, the *grinding*, for they ground it out between two heavy iron rollers; just let a woman take a few turns at the crank and we venture to say she will wish herself back at the old-fashioned dasher, with the "twenty-pound baby" on her arm into the bargain!—We tried it in the show room here in the city where the little "elephant" was exhibiting.—And we know of an editor who had a present made him of one of these three-minute butter grinders. His wife tried it, and so did his children, and his hired man, and *he* tried it also, but no one ever saw a puff for it afterwards in the columns of his paper!

Such potatoes! Housekeepers, do you ever read the advertisements in the FARMER? If so you have noticed one or two very modest ones offering Prince Albert potatoes for sale. If you have never had an opportunity to try these potatoes, make an effort to have at least enough for seed this year, so that by the time of potato harvest in 1861, you may have it to say from experience that you know what good potatoes are.

We were down in Lenawee county a week or two since and had a taste of them; and, what is still more satisfactory, a friend at Summerfield, just within the borders of Monroe county, sent by us a bag of very superior samples for the editor to plant on trial in his garden this year. In presenting them to his editorship we asked to be allowed a share in the produce, for our next winter's eating.—And we have the promise of all we want, *provided we do the hoeing!* Well, the potatoes are worth it, and if they can be had on no other terms, we shall certainly lay down the pen for a season and take up the hoe. Who would want to taste of the watery, yellow soap-balls sold and bought in our city market under the name of potatoes, after once feasting both eyes and palate on the princely Prince Alberts?

The weather is too cold for either spring fashions or vegetation to make much advancement. A few buds and bonnets were green enough to try the effect of their premature appearance on the season, but both have wilted and vanished before the icy breath of the blustering March north-westers.

The Patent Churn.

BY A FARMER'S WIFE.

"Our dark days are over, my daughter!" was my first salutation upon my arrival from Detroit, whither I had been on a trading expedition. "You may hail th's as the dawning of a new era in our domestic affairs, for I have got a patent churn that is warranted to produce butter in from five to ten minutes!—Only think! Our churning will be done every morning before breakfast."

"O, I am so glad," she exclaimed, "for I am heartily tired of that old dash churn; but then, mother, what will we do with it?"

"We can lay down pickles in it," I replied; "or put it to some such use, for its race as a churn is run, and ought to have been years ago."

The patent churn was brought in and all its excellencies duly admired and commented upon by old and young, and such was the eagerness of the young ones to test its good qualities, that they soon had water in it, which they churned with a hearty goo! will, looking in occasionally as if expecting through the superior merits of the churn, butter could easily be produced from that; and if they had dreams or visions of anything that night it was of patent churns and golden rol's of butter.

In the the morning bright and early the churn was duly set, when quite a contention arose as to who should do the first churning. The boys, true to the instincts of incipient manhood, claimed this as their right, but after churning by turns about two hours they thought of something very important to be done at the barn! The crank was kept turning by one and another of the household till nearly noon, when a mess of greasy, cheesey stuff, very little resembling butter, was found principally sticking to the zinc of which the churn was composed. So much for the first operation. The next day husband claimed the privilege of trying it, confident that he could make it perform what it promised, and after churning with might and main for half an hour, the sweat starting from every pore, he joyfully exclaimed he had got butter; which was found to be in very small particles, and required hours to gather after he left it. By this time daughter's face was considerably elongated, but she evidently thought mother's strong arm and steady nerve would yet bring the new churn into subjection.

To make a long story short, after repeated trial it was pronounced a failure and set away. That night, "when all around was still," I awoke, feeling troubled. A weight seemed retting upon my conscience; after a moment's reflection, I found it was my patent churn up in judgment against me, condemning me for not giving it a fair trial. It seemed to say, "you have in no instance commenced and ended me yourself; the operations have been performed by one and another, now fast, now slow, when I need a slow uniform motion throughout."

I promised it one more trial, and went to sleep. In the morning when the hands had gone to work, and the children to school, I brought it down from its perch in the garret, where it had been consigned for non-performance of duty, and with much care commenced the trial that was to decide its fate. The distant click of the reaper was was sounding in my ears, and thus I mused. What if it does take a little longer to churn? Isn't it a *patent* churn? and havn't I as good right to patent implements as husband? What is the farmer's wife any way? Nothing but a drudge; her whole life is one ceaseless round of drudgeries, and while the farmer can have his reaper, mower, &c., t lighten his labors, the wife can't even have a patent churn! I next tried reading, and then singing to while away the tedious hours, but still kept up that same monotonous whirl. But the dinner hour was approaching, my patience was exhausted, the old churn was brought from its hiding place in the cellar, and, after a hot water bath, the cream transferred to it, when a few minutes sufficed to finish it. But the doom of the patent churn was irrevocably sealed. Early one frosty morning, amid numerous marvelously cunning jokes cracked at my expense, it was brought from its retreat, and compelled to take the back track for Detroit. Arriving there, its former owner objected to receiving it, alleging as a reason that I had not given it a fair trial, and advised me to bring it back.

"Do as you please about keeping it," I replied, "but it will find a watery grave in the river, before I will take it back, for I would sooner have a ghost in my garret."

This was four years ago. That daughter is churning her own butter for her own family, but among all her requests for housekeeping implements was none for a patent churn, and my old dash churn is still doing good service; and here let me acknowledge that it is not near such hard work to use it since the advent of its city relative, which, notwithstanding its utter worthlessness, continues to come on exhibition year after year at the State Fair. If it should be turned loose on the fair ground next fall, I hereby recommend to the authorities that the exhibitor be arrested for trespass, and offer myself as a witness free of charge. Seriously, occupying the ground with such worthless inventions cannot be considered in any other light. I had like to have forgotten to give a description of it. The name of the patentee I forget, but it was somebody's thermometer churn, composed of zinc, with an aperture around the outside to regulate the temperature of the cream by warm or cold water, and a stationary thermometer on one end by which such temperature was supposed to be indicated.

Husband says perhaps the inventor has employed me to bring it into notice! and so I will stop after affixing this

MORAL.

Be careful how you exchange an old friend for a new.

Husbands and Wives.

MRS. ADAMS:—I beg leave to inquire, through the medium of your paper, or your part of it at least, whether Mr. Perfection Stunner and John Farmer are real flesh and blood men, or creatures of the imagination; also to express my opinion of the *manly* sentiment they so strenuously advocate. I can hardly believe it possible that a being in the form of man, and endowed with common sense, could possess so contemptible and mean a spirit as is manifested in their letters. I hardly think them sincere, and hope for the honor of manhood they are not. If they are sincere, what *can* they know of the better feelings of our nature? Of affection, sympathy, and the many acts of mutual forbearance and kindness which true love dictates? As well might their wives be the veriest slaves on the face of the earth, as far as any social happiness or pleasures are concerned. I wonder if Mr. Stunner informed his wife before marriage what his intentions were in regard to her future position as his wife. Indeed, I'll warrant he did nothing of the kind. He came to her with pleasant words, and smiles, and gentle winsome ways; was just as ready to take her to a party or ball, as she was to go. O shame! deceitful man!

Does a man *buy* his wife, soul and body when he marries her, as he does an ox or horse when he pays the money for them? Has he a right to control all her actions, her in-comings and out-goings? If so, great is the pity that rule wont work both ways. It would thin out the gambling saloons and tipling shops wonderfully!

How many wives there are whose lives are one continual round of toil, sorrow, privation and starvation. Yes starvation! Not always for want of food, but often for a word of sympathy, a look of love, or an act of kindness. Husbands are not aware how much they lose often, by their unfeeling conduct. The best love of a true woman's heart is worth possessing in the hour of sorrow and adversity. But if a husband does not deserve it, he will not get it. It is not human nature. A wife may live on and endure, actuated by principle, and a stern sense of duty, as well as for the sake of her children, but the pure sweet waters of affection are dried up, and she only looks for happiness when her task is done, when the weary worn out tenement lies beneath the sods of the valley, and the freed spirit roams in heavenly places.

Now I would not have any one think I am speaking from experience. Thank God! I have one of the kindest and best husbands in the world. He does not consider it beneath his dignity to assist me about my churning when at leisure, or to help me work my butter when it is very hard. He often rocks the baby to sleep—which is as great a pleasure to him as it is help to me—instead of letting me hold him on one arm, and do a heavy churning with the other, as that most delectable John Farmer did. I tell you, Mr. John, the recollection of that hour will come to you some day when it will not be so pleasant.

Mr. Stunner—what a romantic name—says if a wife wants to know anything, let her ask her husband at home. Great good it would do to ask *some* of them. I do not wish Mr. S. to think I consider all men bad husbands, and all women good wives. Sorry am I to say what I know is true, that many home-loving, kind, affectionate husbands are harrassed all their days, by vain showy, party-going women. But no true woman will cast aside the peaceful quiet of a well regulated home, and the society of a kind devoted husband, for such false unstable pleasures. Hoping Messrs. S. and F. will cultivate a more manly and kindly feeling towards their wives, if they have any—which I doubt somewhat—I subscribe myself

Of the North. HARRIET.

Noted People of the Bible.

BY SLOW JAMIE.

NUMBER TWELVE.

Jacob.—He was a plain man dwelling in tents. This dwelling in tents we generally understand merely to be set in opposition to Esau's way of life, who spent his days in field hunting. But the Rabbins explain it as dwelling in the tents of wise men, i. e., frequenting their tents for instructions. His father was a man of piety and experience. Abraham lived till he was fifteen years of age. Melchizedec, King of Salem and priest of the Most High God, may have lived in his times. If he dwelt in their tents he made rather poor use of their instruction, when he imagined that a birthright purchased for a mess of pottage, or a blessing obtained by deceit, would be of any use to him.

Neverthel ss, when he set out to evade the anger of his brother, and seek a wife at Padan Aram, he manifested a great mind. He was at that time seventy-seven years of age, but that was much younger in those days, than the same number of years would be now. He might be called a young man. The first day he traveled from Bethel to Luz—a distance of about forty miles. Here he ate a cold supper from his scrip, and slept in the open air. He had a strange dream; he saw a ladder reaching from earth to heaven; God was at the top, and angels were going up and down. This would teach him that there is a divine care which protects mortals, and that however distant heaven is from the earth, there is a way from one to the other. He awoke with reverential awe and delight. He made a vow which is note-worthy for its simplicity. The prayer contained three petitions. That God would be with him and keep him in the way, that he would give him food and raiment, and that he would bring him back to his father's house. His promise was also three fold, that the Lord should be his God, that he would worship God in that spot, and that he would dedicate the tenth to his service.—Twenty years afterwards, he who had gone out a lonely wanderer with his staff and only asked for bread to eat and clothes to wear, returned a shepherd prince, so rich that he could make a present to his brother, worth five thousand dollars and never miss it. Nor did he forget his vow.

Jacob was so much encouraged by his dream that his drooping spirits revived, and he cheerfully pursued his journey. The historian says he went on his journey. In the Hebrew it reads: He lifted up his feet, and went on towards the land of the children of the East; denoting the light steps of one who has a cheerful heart. When he found his relatives, he wept with joy, and they were greatly delighted to see him.

Before he was there a month, he was at work attending to Laban's flocks, and for twenty years he was the head shepherd.—Fourteen years he served for his two daughters, and six years for a certain division of his cattle. It was very little substance Laban had when he came, but although he took away an immense herd as his wages, he left Laban a rich man. I have often wondered why Jacob was such a successful shepherd.—That he was a man of a very kind disposition is evident from the delight he afterwards took in his children, and from the way he reconciled his estranged brother. I have remarked in a former paper that this is an important qualification in a shepherd. Patient perseverance characterized him in every position, especially in this calling. Day and night he was at his post, regardless of the heat by day and the frost by night. He observed everything and regarded trifles. This appears from his placing rods before the watering place, when the cattle came to drink. Whether this was of avail or not, we see in the action an observing man. He had not the opportunity of books and papers that we have, but had he lived in our day he would have been a book farmer, and a practical man too. However, his opportunities were good for that time, and he seems to have improved them well. And lastly, he was not a man who would too soon get above his business. This has ruined many an otherwise successful man. Jacob's whole course indicates an humble man. And here I would notice that we are told that a man who is dilligent in business shall stand before Kings, and this happened literally in the case of Jacob. He was introduced to the greatest monarch of his time.

But although Laban was enriched by Jacob, yet he grudged him the part which fell to his share. Covetousness is such a strange vice, that the more it is gratified, the more insatiable it becomes. The more a covetous man gets, the poorer he is, for his desires grow faster than than his wealth. Laban and his sons began to talk about it and then they all got worse. The tongue is such an evil instrument, that when employed it makes the evil dispositions of the heart worse. First they only envied Jacob, now they hate him, for "a lying tongue hateth those that are afflicted by it."

Jacob saw it in their countenances. By divine direction and with the counsel of his wives, he collected his substance, and took an abrupt departure. Laban did not know of it for three days. He then gathered up a band of his associates, and pursued his son-in-law, intending to take the cattle from him. He did not overtake him till he had reached the borders of Canaan. So he had followed him at least two hundred miles. On the way he had a dream which alarmed him and he was afraid to attack him openly. But Rachel, unknown to Jacob, had been so foolish as to carry off certain little images which they worshipped. He pretended that he had pursued him for these. Jacob challenged him to look for them, which he did, but through the cunning of Rachel did not find them.

Laban now experienced the common penalty of liars, not to be believed when they speak the truth, for Jacob did not think he had lost his teraphim at all. He charged him with deceit, before his servants and all Laban's own comrades, reminded him how often he had cheated him, and told him plainly that he meant violence in his pursuit.—This kind of language from Jacob, who seldom spoke severely to any one, cut him to the quick. But he could not deny it, so he had to cover it over with loud professions of love, proposing to make a covenant, which they did, commemorating it by a heap of stones which they built on the spot. Jacob called it 'Galeed,' and Laban 'Jegar-Sahadutha.' They both mean the same thing, 'a heap of witness.' But Jacob used plain common language, and the other preferred dictionary words.

The style and manner of Jacob on this occasion, was that of a man who would forget past injuries and renew old friendship. In Laban we see the affectation of a man ashamed of himself, yet not candid enough to own up.—He stipulates that Jacob would neither afflict his daughters, nor take other wives beside them. The old hypocrite! just as though he cared whether Jacob afflicted them or not, so as he got the dowry! So Rachel and Leah thought themselves, and Jacob would never have been guilty of of polygamy had it not been for his deception. The old man's feelings could not have been very comfortable as he turned to go home.

Immediately after this, Jacob met Esau.—We have seen how he gained the victory there by yielding. And now we might suppose Jacob's life after this would be happy. But it was one trouble after another, almost as long as he lived. His favorite wife died, leaving an infant son which she called the 'Son of my Sorrow,' but he changed the name to the 'Son of my Right Hand.' Soon after his daughter disgraced the family. Two of his sons in a rage committed a horrible massacre, wreaking their vengeance on the innocent and guilty alike. Afterwards his first born committed a crime more disgraceful still. To crown all, Joseph, his pride and joy, went out from him and they brought a torn piece of his robe stained with blood. He thought how the tender limbs were torn asunder and quivered in the jaws of some cruel beast, and for years he was a disconsolate mourner. Thus we see how many troubles even good men may expect in this world. But when at last his trials seemed at the worst, when another son was lost and a third in danger, and a sore famine pressing on them all, there came news that Joseph was alive, and the chief ruler in a great empire No wonder he did not believe it. No wonder when he found it was true, he was willing to die. He had not thought to see Joseph's face but God allowed him to see his children.

At length when he came to die, his sun shone out with all its glory. He called his sons around his death bed, and in lofty strains of sublime poetry, predicts their future destiny. He who had always been so unassuming now rises in the majesty of a patriarchal king. His language is still as plain and simple as ever, but the grandness of the thought gives a magnificence to the very language. Like the fabled swan, he sings his last and only song with his expiring breath. After this he was carried to his last resting place in Machpelah, not simply by his numerous family, but by the Egyptian nation. He was the lowliest of all the patriarchs but the most honored in the end. A writer of eminence has said that the world will never estimate us higher than we estimate ourselves. The life of Jacob falsifies the notion. He passed through the world apparently unconscious of his own genius, till it burst out on his death bed.—He never sought honor, yet it sought him and followed him to the grave.

The Stunner System.

MRS. EDITRESS:—I have been much interested in the articles in the FARMER on the duties of married women, which were, I suppose, written for their special benefit; but as, married or unmarried, women must have duties devolving upon them through life, while single they would like to know what awaits them in future. With these thoughts I have read the article just mentioned; and I must say that we have some very remarkable men in this age of the world. They must possess extraordinary reasoning faculties to be able to make such rules for taming women; which, no doubt, would work admirably for men that have no higher objects in view than to make their wives mind, making them subject to their own will and power, teaching them their proper places, exercising their authority over their tongue, dress and whole deportment. But while this process of reformation is going on, where is the domestic comfort which is so essential to married life? Where are the children, and what are they doing? If such a man should be blest with children, is the wife to govern them, or is Perfect Stunner always there to soothe their cries and ease their pains? Why, if that is the case, I don't doubt but there would be a unanimous vote for such a husband! Every woman in Christendom, whether married or single, would vote for a John Farmer or Perfection Stunner, but this is not apt to be the case; and I would say to every young man that has not yet digested the advice given them by Mr. Stunner, he had better ponder well the subject, for getting a woman in your power is not so easy a matter as you may imagine. The rule given by Mr. Stunner may not apply in all cases. It is not every one that can be tamed as easily as Mrs. Stunner has been, and especially without the judicious treatment she had received! Why, I verily believe Perfect Stunner will soon go ahead of Rarey, the horse tamer, if he has not already in his own estimation.

BELL CLIFTON.

Ionia, March, 1860.

A Letter to the Boys.

MR. JOHNSTONE:—In looking over the FARMER, I notice, every week, Enigmas, Charades, etc., but no letters as yet from any of my boy friends. I cannot imagine why they cannot write letters as well as puzzles or enigmas.

For my part I think enigmas are getting old, and shall have to set the writers down as *Old Fogies*. Those that have been writing enigmas for the last three or four years, now is the time to write letters, and let the younger ones write enigmas.

I'm not a regular *deown* East Yankee, but for all that, I'm rather inquisitive; that being the case you will allow me to ask one question. Why do some of the boys sign their initials? Why not write your whole name? are you afraid somebody will see it? I do not see why you are afraid; of course the people in your own vicinity know who you are by your initials—at least I should think they would, and those that are strangers to you, will not know you any quicker by seeing your whole name than they will by seeing your initials. It does not look right to see a boy's initials signed to a letter or enigma. It looks as though he was going to do, or had done, something that he did not want any one to know that he was the chap that did it.

Boys, I say, don't be bashful. Write and sign your name in full Who are you afraid of? not Mr. Johnstone I hope. I will pledge you my word of honor, that he has never hurt *me*, although I have sent him enigmas different times, and this is the second letter, and when I sent the first one (you may believe it if you have a mind to) he did not harm me at all.

You are not afraid of your own folks are you? What if they do blackguard you a little, what do you care? Remember it is not more than my folks did when they saw my first letter in print. But I turn it off by saying,—Perhaps you wish you could do as well the first time

Now boys, sit down and write a letter, send it to Mr. Johnstone, and by return mail you will see it in print. As Dow Jr. says—"Drive on your horses and let the laziest nation be the hindmost." Perhaps you say you have nothing to write about. Criticise my letter, and if you pick out all there is wrong in it, and make but few remarks on each error of mine, I think you will have a letter long enough to suit you. But hold, if older persons chance to read this letter, they will please think of these lines:—

Don't view me with a critic's eye,
But pass my imperfections by.

I should not wonder if you would say—we will have to pass the whole letter by, then if we pass all the imperfections by, but be that as it may, I have done the best I can to get some or all of my boy friends to write, and if they will not write after seeing this, all I have to say is that Mr. Johnstone and I will have a good time together; I will write and he will read. That is very near like the old man and woman with the whiskey, they each had a barrel of whiskey, and the old man had five cents; the old man would buy one drink of the old woman with the five cents; then the old woman would buy of the old man, so they kept the five cents going till the whiskey was gone.

Mr. Johnstone, I think I have written enough to convince the boys that I'm in earnest, and that being my only aim in this letter I will close.

Respectfully Yours,
H. M. EVANS.

Marengo, March, 1860.

Names of Quadrupeds Enigmatically Arranged.

No. 1. A part of yourself, a river, a cooking utensil and *a-mus*.
No. 2. To injure or deface, and a number.
No. 3. A word that signifies before, and a long step.
No. 4. Sixteen and a half feet, and an animal of the feline race.
No. 5. A word that signifies two, and a male child.
No. 6. What is seen in the forest and the noise of a hen.
No. 7. An emmet, and one that eats.
No. 8. A water fowl, and its beak.

Plymouth, March, 1860. J. W. E.

Answer to Geographical Enigma of last Week—SIR WILLIAM CAMPBELL. Answered by W. F. Craig, Detroit.

MICHIGAN FARMER.

R. F. JOHNSTONE, EDITOR.

Publication Office, 130 Jefferson Avenue.

DETROIT, MICHIGAN.

THE MARKETS.

Breadstuffs.

There is nothing noticeable in the market for breadstuffs since our issue of last week. The foreign markets remain in the same state, and the eastern markets are quiet, with perhaps a slight shade of more firmness on the part of holders. We note that the reports given in the Chicago and Milwaukee papers indicate that there is less wheat and flour in store at those places at this date than there was at the same date last year. But at Chicago, there is nearly ten times the quantity of corn, the amount in store being stated at 1,178,181 bu against 94,882 last year. There is in the whole twice the amount of grain of all kinds on hand that there was last year—the whole amount being summed up at 1,785,933. It must be borne in mind, however, that the railroads have been rushing forward flour and wheat eastward in great quantities, their facilities for doing that kind of business being better than ever before. In this city the sales are light, and arrivals as yet are of little account, there being little or no demand beyond the local consumption.—The demand for potatoes has dropped off considerably, and prices are lower. For apples there is a very good demand, and our quotations show that full prices are paid.

Extra white wheat flour ₩ bbl	$ 5 25@ 5 50
Superfine flour	5 00@ 5 25
White wheat, ₩ bush	1 25@ 1 30
Red wheat	1 16@ 1 22
Corn in the street, bush	0 46@ 0 47
Corn in store, bush	0 50@ 0 51
Oats, bush	0 33@ 0 34
Rye, bush	0 75@ 0 78
Barley, ₩ cwt	1 25@ 1 37½
Corn meal, ₩ cwt	1 06@ 1 12½
Bran, ₩ ton	15 50@16 00
Coarse middlings, ₩ ton	18 00@19 00
Fine middlings	22 00@24 00
Butter, fresh roll ₩ lb	0 12@ 0 14
Butter in firkin per lb	0 10@ 0 12
Eggs, ₩ doz	0 10@ 0 12
Potatoes, Meshannocks ₩ bush	0 28@ 0 30
Common sorts ₩ bush	0 22@ 0 25
Apples, green, best qualities ₩ bbl	3 20@ 3 50
2d quality, ₩ bbl	2 50@ 3 00
Clover seed, ₩ bush of 60 lbs	4 00@ 4 25
Timothy seed, per bush	3 50@ ....

Live Stock, &c.

The market for live stock has been dull the past week, and there is no change in prices. Six very good and prime cattle were purchased by Smith of the Marine Market for 3¾c live weight, and ten head of sheep that weighed, when dressed, 45 pounds each, were bought for $40 or $4 ₩ head. Their pelts sold for $1 75 each.—Nothing was done this week in hogs. Calves are selling from $3 to $5 each, only two months old and heavy calves bring the latter price. Tallow has declined, and is now but 6c. Hides remain steady at 5½c for butchers' and 6c for country hides.

We note there were 135 head of Michigan cattle offered in the Albany market this week.

The New York market is reported as much duller than that of last week and the prices of cattle on the average less by $7 ₩ head. The supply reached over 3,100 head, which, for this season, is very large.

Wool.

We have no change in prices to report this week. The dealers are very quiet. At the east quotations remain steady, whilst sales have been very light, the depression amongst the manufacturers operates on the market and render the views of sellers and buyers so different that no sales are made. We quote 41 as the outside price given here for the best lots of pulled wool offered in this market.

STOCK BREEDERS' COLUMN.